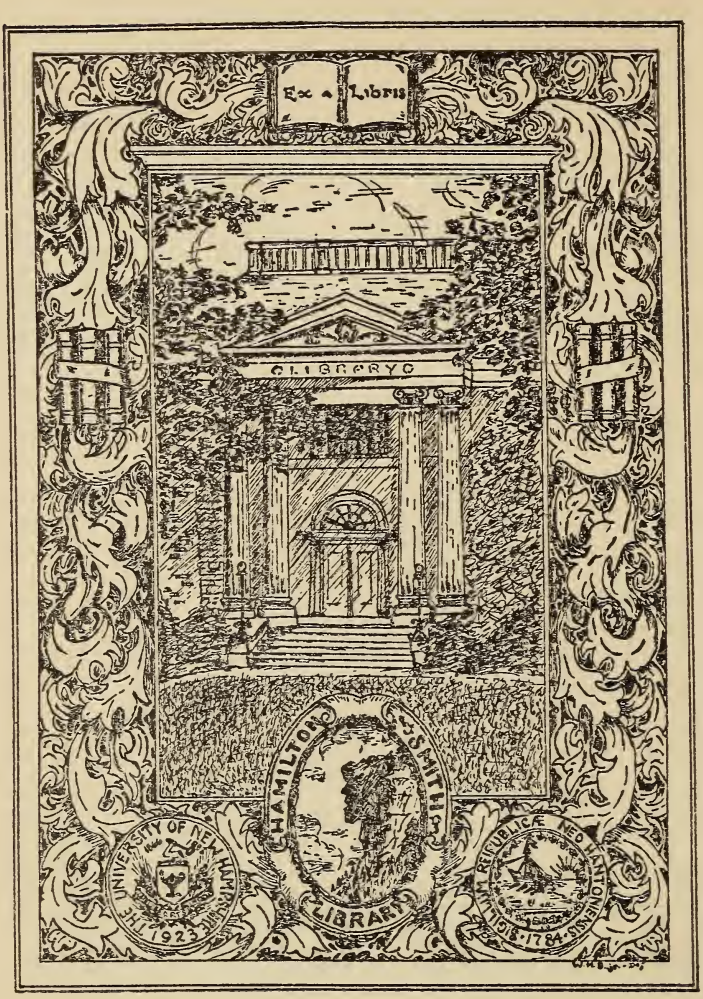
BULLETIN OF THE
UNIVERSITY OF NEW HAMPSHIRE

CATALOG

1937-1938

DURHAM, NEW HAMPSHIRE



The University of New Hampshire and the New Hampshire College of Agriculture and the Mechanic Arts

DURHAM - NEW HAMPSHIRE

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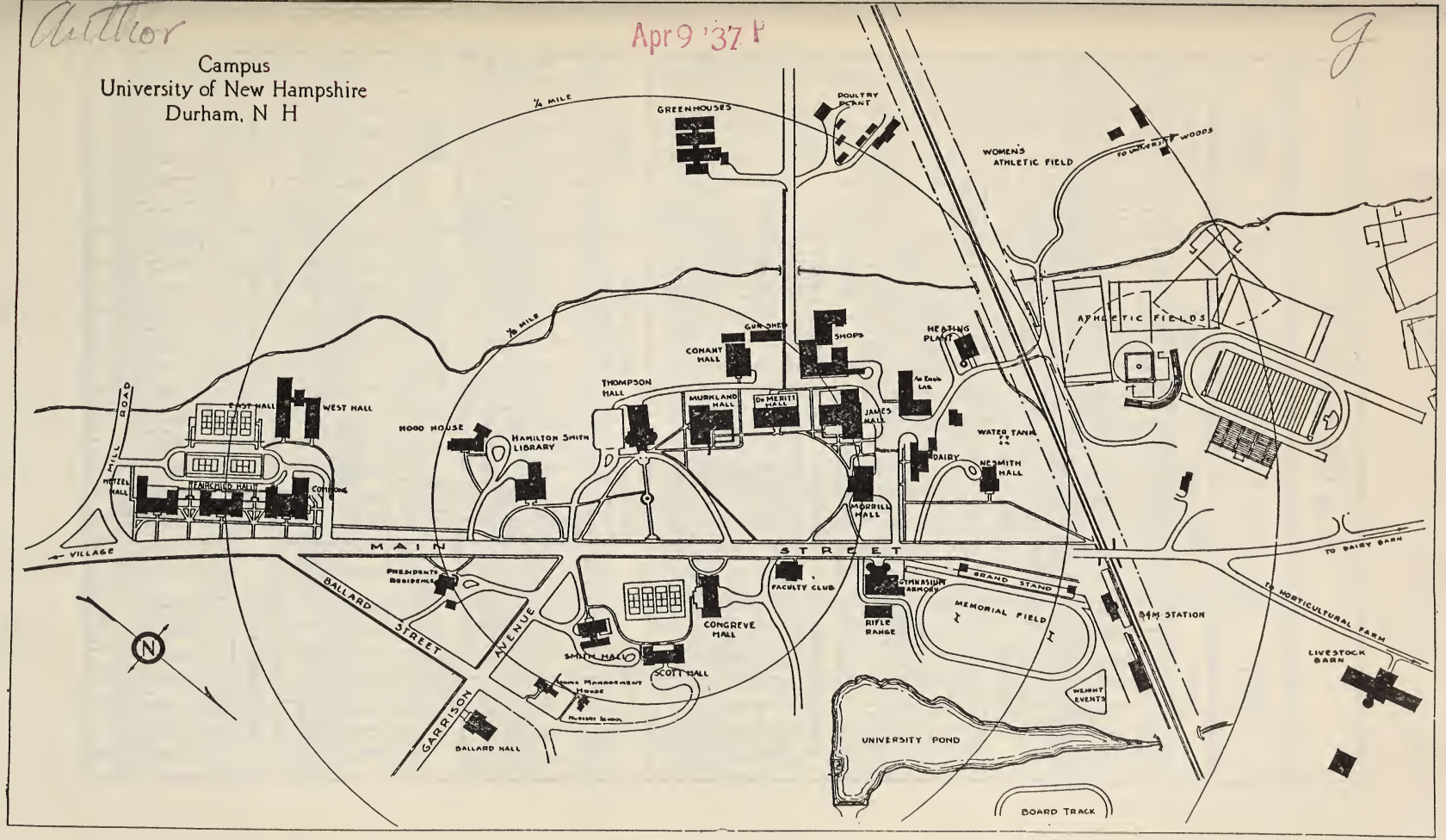
BULLETIN
of the
UNIVERSITY OF NEW HAMPSHIRE
Vol. XXVIII February, 1937 No. 6



This map shows the buildings of the University and the immediately adjacent grounds. It does not include the farms, forests, gardens or orchards.

CALENDAR

1937

JULY

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
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AUGUST

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
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22	23	24	25	26	27	28
29	30	31	..	..	..	..
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SEPTEMBER

S	M	T	W	T	F	S
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OCTOBER

S	M	T	W	T	F	S
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3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

NOVEMBER

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
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DECEMBER

S	M	T	W	T	F	S
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1938

JANUARY

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FEBRUARY

S	M	T	W	T	F	S
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MARCH

S	M	T	W	T	F	S
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APRIL

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MAY

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JUNE

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JULY

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AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

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1939

JANUARY

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15	16	17	18	19	20	21
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FEBRUARY

S	M	T	W	T	F	S
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12	13	14	15	16	17	18
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MARCH

S	M	T	W	T	F	S
..	..	..	1	2	3	4
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19	20	21	22	23	24	25
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APRIL

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23	24	25	26	27	28	29
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MAY

S	M	T	W	T	F	S
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21	22	23	24	25	26	27
28	29	30	31	..	..	..
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JUNE

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
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18	19	20	21	22	23	24
25	26	27	28	29	30	..
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UNIVERSITY CALENDAR

1937-38

SUMMER SESSION

1937

June 28	Monday	Registration Day
June 29	Tuesday	Classes begin at 8 A.M.
Aug. 6	Friday	Summer Session closes at 4 P.M.

FIRST SEMESTER

1937

Sept. 14	Tuesday	Matriculation Day—Freshman Class
Sept. 20	Monday	Registration Day—Upper Classes
Sept. 21	Tuesday	Recitations begin at 8 A.M.
Sept. 23	Thursday	University Day—Afternoon holiday
Oct. 15	Friday	Annual Meeting of Board of Trustees
Oct. 23	Saturday	Dads' Day
Nov. 6	Saturday	Home-coming Day
Nov. 11	Thursday	Mid-Semester reports to be filed, 5 P.M.
Nov. 24	Wednesday	Thanksgiving Recess—Wed., 12:30 P.M. to Mon., 8 A.M.
Dec. 18	Saturday	Christmas Recess begins at 12:30 P.M.

1938

Jan. 3	Monday	Christmas Recess ends at 8 A.M.
Jan. 14	Friday	Meeting of Board of Trustees
Jan. 19-28	Wed.-Fri.	First Semester examinations

SECOND SEMESTER

Jan. 31	Monday	Registration Day—All Classes
Feb. 1	Tuesday	Recitations begin at 8 A.M.
Feb.	Friday	Winter Carnival, Fri., 12:30 P.M., to Sat., 12:30 P.M.

Mar. 8	Tuesday	Town Meeting
Mar. 26	Saturday	Spring Recess begins at 12:30 P.M.
Apr. 4	Monday	Spring Recess ends at 8 A.M.
Apr. 14	Thursday	Mid-Semester reports to be filed, 5 P.M.
Apr. 15	Friday	Meeting of Board of Trustees
May 21	Saturday	Mothers' Day
May 31-June 9	Tues.-Thurs.	Second Semester examinations
June 11	Saturday	Alumni Day—Meeting of Board of Trustees
June 12	Sunday	Baccalaureate Exercises
June 13	Monday	Class Day Exercises, 10:00 A.M. Commencement, 3:00 P.M.

SUMMER SESSION

1938

June 27	Monday	Registration Day
June 28	Tuesday	Classes begin at 8 A.M.
Aug. 5	Friday	Summer Session closes at 4 P.M.

BOARD OF TRUSTEES

His Excellency, Governor Francis P. Murphy, ll.d., *ex officio*

President Fred Engelhardt, ph.d., *ex officio*

Andrew L. Felker, *Commissioner of Agriculture, ex officio*

Roy D. Hunter, *President* — West Claremont
June 14, 1916 to June 30, 1937

Harry D. Sawyer — Woodstock
September 15, 1926 to June 30, 1938

James A. Wellman, b.s. — Manchester
January 26, 1928 to June 30, 1939

Robert T. Kingsbury — Keene
January 27, 1928 to June 30, 1940

*Charles H. Hood, b.s., d.sc. — Boston, Massachusetts
May 6, 1929 to June 30, 1939

George T. Hughes, a.m., ll.d. — Dover
July 1, 1931 to June 30, 1939

*John S. Elliott, b.s., *Secretary* — Madbury
July 1, 1932 to June 30, 1940

Jessie Doe — Rollinsford
July 1, 1932 to June 30, 1938

John T. Dallas, a.b., d.d., ll.d. — Concord
July 1, 1933 to June 30, 1937

Frank W. Randall, b.s. — Portsmouth
July 1, 1936 to June 30, 1940

*Elected by Alumni.

OFFICERS OF ADMINISTRATION

*Roy D. Hunter, *Acting President of the University*
Fred Engelhardt, ph.d., *President of the University*

Charles H. Pettee, a.m., c.e., ll.d., *Dean of the Faculty*
John C. Kendall, b.s., *Director of the Agricultural Experiment Station and Extension Service*
George W. Case, m.c.e., *Dean of the College of Technology and Director of the Engineering Experiment Station*
C. Floyd Jackson, b.a., m.s., *Dean of the College of Liberal Arts*
M. Gale Eastman, ph.d., *Dean of the College of Agriculture*
Hermon L. Slobin, ph.d., *Dean of the Graduate School*
Norman Alexander, ph.d., *Dean of Men*
Ruth J. Woodruff, ph.d., *Dean of Women*

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Eugene K. Auerbach, b.a., *Acting Alumni Secretary and Acting Director, Bureau of Appointments*

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Fred L. Wentworth, *Manager of the Bookstore*
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Beatrice M. Richmond, *Cashier, Business Office*
Gladys Tasker, *Assistant Registrar*
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Sadie V. Burke, r.n., *Nurse*
Fedora L. Lessard, r.n., *Nurse*
Betty G. Sanborn, *Secretary to Director of Commercial Departments, College of Agriculture*
Helen F. Jenkins, *Secretary to the Faculty of the College of Liberal Arts*
Evelyn H. Brettell, *Secretary to the Dean of the College of Liberal Arts*
Mildred M. Flanders, *Secretary to the Dean of the College of Technology*
Elizabeth E. McFadden, *Secretary to the Dean of the College of Agriculture*
Alberta R. Morrill, b.a., *Secretary to the Dean of Men*
Charles O. Nason, *Secretary to the Department of Physical Education and Athletics*

* May 23, 1936—April 1, 1937.

ANNE E. CARROLL, *Secretary to the Officer in Charge of Freshmen and Assistant to the Director, News Bureau*
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ANNIE L. SAWYER, *Matron of Hood House*
SHIRLIE L. WHITNEY, *Matron of Congreve Hall*
EMMA A. THOMPSON, *Matron of the Commons Dormitory*
LOUISE M. COBB, *Matron of Hetzel Hall*
ARLINE B. DAME, *Matron of Fairchild Hall*
MAY E. PHIPPS, B.S. IN EDUC., *Matron of Smith Hall*

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J. DORIS DART, B.A., *Catalog Librarian*
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GRATIA T. HUGGINS, *Library Assistant*
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ALFRED E. RICHARDS, PH.D., *Professor of English*
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†HERBERT F. RUDD, PH.D., *Professor of Philosophy*
HAROLD H. SCUDDER, B.S., *Professor of English*
T. BURR CHARLES, B.S., *Professor of Poultry Husbandry*
GEORGE N. BAUER, PH.D., *Professor of Statistics and Officer in Charge of Freshmen*

* Arranged in order of seniority of appointment.
† Leave of absence, February 1—June 30, 1937.

M. Gale Eastman, PH.D., *Professor of Agricultural Economics*
Harold A. Iddles, PH.D., *Professor of Chemistry*
Edmond W. Bowler, S.B. in S.E., *Professor of Civil Engineering*
Edward W. Putney, Colonel, C.A.C., *Professor of Military Science and Tactics*
Clifford S. Parker, PH.D., *Professor of Languages*
Kenneth S. Morrow, M.S., *Professor of Dairy Husbandry*
A. Monroe Stowe, PH.D., *Professor of Education*
Charles W. Coulter, PH.D., *Professor of Sociology*
Loring V. Tirrell, B.S., *Professor of Animal Husbandry*
Ford S. Prince, B.S., *Professor of Agronomy*

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Arthur W. Johnson, M.B.A., C.P.A., *Associate Professor of Economics*
William G. Hennessy, A.M., *Associate Professor of English*
Thorsten V. Kalijarvi, PH.D., *Associate Professor of Political Science*
Norman Alexander, PH.D., *Associate Professor of Economics*
Adolph G. Ekdahl, PH.D., *Associate Professor of Psychology*
Robert W. Manton, *Associate Professor and Director of Music*
Clement Moran, A.B., M.S., *Associate Professor of Physics*
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Alma D. Jackson, M.A., *Associate Professor of Zoölogy*
Lucinda P. Smith, M.A., *Associate Professor of English*
John S. Walsh, A.M., *Associate Professor of Languages*
Melvin M. Smith, A.M., *Associate Professor of Chemistry*
Harlan M. Bisbee, A.M., *Associate Professor of Education*
Jesse R. Hepler, M.S., *Associate Professor of Horticulture*
Walter E. Wilbur, M.S., *Associate Professor of Mathematics*
Donovan Swanton, Major, Infantry, *Associate Professor of Military Science and Tactics*
George W. White, PH.D., *Associate Professor of Geology*
Russell R. Skelton, B.S. in C.E., C.E., *Associate Professor of Civil Engineering*
Heman C. Fogg, PH.D., *Associate Professor of Chemistry*

Edwin R. Rath, B.S., E.E., *Industrial Research Engineer, College of Technology*

ASSISTANT PROFESSORS*

Thomas J. Laton, B.S., *Assistant Professor of Mechanical Engineering*
Clark L. Stevens, PH.D., *Assistant Professor of Forestry*
Paul C. Sweet, B.S., *Assistant Professor of Physical Education for Men*
Edward T. Donovan, B.S., *Assistant Professor of Mechanical Engineering*

* Arranged in order of seniority of appointment.

ARTHUR W. JONES, M.A., *Assistant Professor of History*
JOHN D. HAUSLEIN, M.A., *Assistant Professor of Economics*
IRMA G. BOWEN, B.S., *Assistant Professor of Home Economics*
FREDERICK D. JACKSON, B.S., *Assistant Professor of Electrical Engineering*
RUDOLF L. HERING, PH.B., *Assistant Professor of Languages*
MARIAN E. MILLS, B.S., M.A., *Assistant Professor of Botany*
RAYMOND R. STARKE, A.M., *Assistant Professor of Physics*
STANLEY R. SHIMER, M.S., *Assistant Professor of Agricultural and Biological Chemistry*
L. PHELPS LATIMER, PH.D., *Assistant Professor of Horticulture*
JULIO BERZUNZA, M.A., *Assistant Professor of Languages*
CARL L. MARTIN, D.V.M., *Assistant Professor of Veterinary Science*
E. HOWARD STOLWORTHY, B.S., *Assistant Professor of Mechanical Engineering*
EDYTHE T. RICHARDSON, M.S., *Assistant Professor of Zoölogy*
ALLAN B. PARTRIDGE, M.A., *Assistant Professor of History*
PHILIP M. MARSTON, M.A., *Assistant Professor of History*
PAUL S. SCHOEDINGER, M.A., *Assistant Professor of English*
MARVIN R. SOLT, M.S., *Assistant Professor of Mathematics*
WILLIAM B. NULSEN, M.S., *Assistant Professor of Electrical Engineering*
NAOMI M. G. EKDAHL, PH.D., *Assistant Professor of Psychology*
EDMUND A. CORTEZ, M.A., ED.M., *Assistant Professor of English*
PAUL P. GRIGAUT, CERT. SORBONNE, DIPL. ECOLE DU LOUVRE, *Assistant Professor of Languages*
JAMES A. FUNKHOUSER, PH.D., *Assistant Professor of Chemistry*
CARROLL S. TOWLE, PH.D., *Assistant Professor of English*
MARGARET R. HOBAN, B.S. IN ED., *Assistant Professor and Director of Physical Education for Women*
RUTH J. WOODRUFF, PH.D., *Assistant Professor of Economics*
ARNOLD PERRETON, B.ARCH., *Assistant Professor of Architecture*
RICHARD H. KIMBALL, PH.D., *Assistant Professor of Chemistry*
MILTIADES S. DEMOS, PH.D., *Assistant Professor of Mathematics*
LEROY J. HIGGINS, B.S., *Assistant Professor of Agronomy*
CHARLES M. MASON, PH.D., *Assistant Professor of Chemistry*
HAROLD C. GRINNELL, M.S., *Assistant Professor of Agricultural Economics*
GIBSON R. JOHNSON, PH.D., *Assistant Professor of History*
CLAIR W. SWONGER, A.M., *Assistant Professor of Economics*
WILLIAM YALE, PH.B., M.A., *Assistant Professor of History*
WILLIAM H. HARTWELL, M.A., *Assistant Professor of Physics*
SAMUEL L. BURACKER, MAJOR, INFANTRY, *Assistant Professor Military Science and Tactics*
THEODORE R. MEYERS, M.A., *Assistant Professor of Geology*
GEORGE R. THOMAS, B.ARCH., *Assistant Professor of Architecture*
W. GEORGE DEVENS, CAPTAIN, COAST ARTILLERY CORPS, *Assistant Professor of Military Science and Tactics*

UNIVERSITY OF NEW HAMPSHIRE

†Ernest W. Christensen, b.s., *Assistant Professor of Physical Education and Athletics*
Charles A. Bottorff, Jr., d.v.m., *Assistant Professor of Poultry Husbandry*
Carl Lundholm, b.s., *Assistant Professor of Physical Education and Athletics*
Herbert C. Moore, m.s., *Assistant Professor of Dairy Husbandry*
George M. Foulkrod, m.s., *Assistant Professor of Agricultural Engineering*
George L. Prindle, b.s., Major, Infantry, *Assistant Professor of Military Science and Tactics*
Robert G. Webster, m.a., *Assistant Professor of English*
††Carroll M. Degler, m.b.a., *Assistant Professor of Economics*
Thomas H. McGrail, ph.d., *Assistant Professor of English*
Donald H. Chapman, ph.d., *Assistant Professor of Geology*
Sylvester H. Bingham, a.m., *Assistant Professor of English*

INSTRUCTORS*

James Macfarlane, *Instructor in Floriculture*
Lyman J. Batchelder, *Instructor in Mechanical Engineering*
Helen W. Leighton, *Instructor in Home Economics*
John C. Tonkin, *Instructor in Mechanical Engineering*
Stuart Dunn, ph.d., *Instructor in Botany*
William F. Marsh, *Instructor in Physical Education and Athletics*
Elias M. O'Connell, *Instructor in Mechanical Engineering*
Lewis C. Swain, b.s., *Instructor in Music and Forestry*
Marion J. Stolworthy, *Instructor in Home Economics*
Harold I. Leavitt, b.s., m.ed., *Instructor in Physics*
John A. Floyd, a.b., *Instructor in Languages*
Charles O. Dawson, b.c.e., *Instructor in Civil Engineering*
Earl H. Little, m.s., *Instructor in Agricultural Education*
William L. Kichline, m.s., *Instructor in Mathematics*
Gwenyth M. Ladd, b.s. in ed., *Instructor in Physical Education for Women*
Ruth E. Thompson, m.s., *Instructor in Zoölogy*
John J. Uicker, b.s., m.e., *Instructor in Mechanical Engineering*
James G. Conklin, m.s., *Instructor in Entomology*
Henry S. Clapp, b.s., *Instructor in Ornamental Horticulture and Supervising Landscape Architect*
Albert E. Tepper, m.s., *Instructor in Poultry Husbandry*
Lawrence W. Slanetz, ph.d., *Instructor in Bacteriology*
Donald M. Perkins, m.s., *Instructor in Mathematics*
††Erwin W. Bard, m.a., *Instructor in Political Science*
Dorothy V. Mummery, m.a., *Instructor in the Nursery School in the Department of Home Economics*
Lawrence H. Houtchens, ph.d., *Instructor in English*
Albert F. Daggett, ph.d., *Instructor in Chemistry*
Kendrick S. French, b.s., *Instructor in Chemistry*

* Arranged in order of seniority of appointment.

† Leave of absence, November 20, 1936—February 28, 1937.

†† Leave of absence, 1936-37.

JOHN J. CONROY, B.A., *Instructor in Physical Education and Athletics*
CLYDE W. MONROE, M.S., *Instructor in Zoölogy*
W. ROBERT EADIE, M.S., *Instructor in Zoölogy*
ELEANOR L. SHEEHAN, M.S., *Instructor in Zoölogy*
CONSTANCE E. LABAGH, M.S., *Instructor in Home Economics*
RUTH C. ADAMS, B.A., *Instructor in Economics*
JAMES T. SCHOOLCRAFT, JR., PH.D., *Instructor in Languages*
EDMUND W. FENN, A.M., *Instructor in Political Science*
PERLEY F. AYER, B.S., *Instructor in Agricultural Economics*
HENRY DEMERS, B.S., *Instructor in Physical Education and Athletics*
IRVING R. HOBBY, B.B.A., *Instructor in Economics*
EDWARD J. BLOOD, B.S., *Instructor in Physical Education and Athletics*
ALBION R. HODGDON, PH.D., *Instructor in Botany*
JOSEPH E. BACHELDER, JR., B.A., *Instructor in Sociology*

ASSISTANTS*

FRED W. WOOD, SERGEANT, *Assistant in Military Science and Tactics*
FRED H. BROWN, SERGEANT, *Assistant in Military Science and Tactics*
BETHYL C. HENNESSY, *Assistant in Oral English*
HENRY A. DAVIS, M.S., *Assistant in Agricultural and Biological Chemistry*
EDNA F. DICKEY, M.A., *Assistant in History*
ELIZABETH C. FERNALD, A.B., *Assistant in the Nursery School in the Department of Home Economics*
EDMUND H. DICKERMAN, B.S., *Graduate Research Assistant in the Engineering Experiment Station*
BARBARA ROWELL, B.A., *Assistant in English*
DONALD C. GREGG, B.S., *Graduate Assistant in Chemistry*
CARL K. SHUMAN, B.S., *Graduate Assistant in Agricultural and Biological Chemistry*
TERRENCE J. RAFFERTY, B.A., *Graduate Assistant in Languages*
WARREN F. PECKHAM, B.S., *Graduate Assistant in Chemistry*
NELL W. EVANS, B.S. IN P.E., *Graduate Assistant in Physical Education for Women*
MARION C. BECKWITH, A.B., *Graduate Assistant in Physical Education for Women*
WILLARD T. PARKER, B.S., *Graduate Research Assistant in the Engineering Experiment Station*
WILBUR H. MILLER, B.S., *Graduate Assistant in Chemistry*
GLADYS E. MACPHEE, B.S., ED.M., *Assistant in Education*
JAMES W. CLAPP, B.S., *Graduate Assistant in Chemistry*
JOSEPH NAGHSKI, B.S., *Graduate Assistant in Botany*
RICHARD L. LEWIS, B.S., *Graduate Research Assistant in the Engineering Experiment Station*
LEWIS A. KNOX, B.S., *Graduate Research Assistant in the Engineering Experiment Station*
DONALD L. KYER, B.A., *Graduate Assistant in Zoölogy*
WILLIAM J. LOCKE, B.S., *Graduate Assistant in Civil Engineering*
MADELEINE A. COURNOYER, A.B., *Graduate Assistant in Languages*
HERBERT B. COWDEN, B.S., *Graduate Assistant in Chemistry*

*Arranged in order of seniority of appointment.

NEW HAMPSHIRE AGRICULTURAL EXPERIMENT STATION

THE STATION STAFF

†Roy D. Hunter, *Acting President*
Fred Engelhardt, ph.d., *President*
John C. Kendall, b.s., *Director*
Frederick W. Taylor, b.s. in agric., *Agronomist*
Walter C. O'Kane, m.a., d.sc., *Entomologist*
Ormond R. Butler, ph.d., *Botanist*
Ernest G. Ritzman, m.s., *Research Professor in Animal Husbandry*
Karl W. Woodward, a.b., m.f., *Forester*
George F. Potter, ph.d., *Horticulturist*
Harry C. Woodworth, m.s., *Agricultural Economics*
Thomas G. Phillips, ph.d., *Chemist*
Walter T. Ackerman, b.s., b.s.a.e., *Agricultural Engineer*
T. Burr Charles, b.s., *Poultry Husbandman*
Kenneth S. Morrow, m.s., *Dairy Husbandman*
Todd O. Smith, m.s., *Associate Chemist*
Jesse R. Hepler, m.s., *Associate Horticulturist*
M. Gale Eastman, ph.d., *Associate Agricultural Economist*
Ford S. Prince, b.s., *Associate Agronomist*
James Macfarlane, *Florist*
Albert D. Littlehale, *Shepherd*
Clark L. Stevens, ph.d., *Assistant Forester*
Stanley R. Shimer, m.s., *Assistant Chemist*
Gordon P. Percival, m.s., *Assistant Chemist*
L. Phelps Latimer, ph.d., *Assistant Horticulturist*
Max F. Abell, ph.d., *Assistant Agricultural Economist*
Stuart Dunn, ph.d., *Assistant Botanist*
Leroy J. Higgins, b.s., *Assistant Agronomist*
Paul T. Blood, m.s., *Assistant Agronomist*
Charles A. Bottorff, Jr., d.v.m., *Poultry Pathologist*
Nicholos F. Colovos, m.s., *Assistant in Animal Husbandry*
Leon C. Glover, m.s., *Research Assistant in Entomology*
Herbert C. Moore, m.s., *Assistant Dairy Husbandman*
Carl L. Martin, d.v.m., *Veterinarian*
*Warren A. Westgate, m.s., *Research Chemical Assistant in Entomology*
Albert E. Tepper, m.s., *Assistant Poultry Husbandman*
Roslyn C. Durgin, b.s., *Record of Performance and Certification Inspector*

† May 23, 1936—April 1, 1937.
* Leave of absence, January 15, 1937—January 14, 1938.

THE STATION STAFF

James G. Conklin, m.s., *Assistant Entomologist*
Henry A. Davis, m.s., *Assistant in Agricultural and Biological Chemistry*
Harold C. Grinnell, m.s., *Assistant Agricultural Economist*
Lawrence W. Slanetz, ph.d., *Assistant in Bacteriology*
Lawrence A. Dougherty, b.s., *Assistant Economist in Marketing*
Arno J. Hangas, b.s., *Research Field Assistant in Agricultural Economics*
Roger M. Doe, b.s., *Assistant in Animal Husbandry*
Alan G. MacLeod, m.a., *Assistant Economist in Marketing*
William W. Smith, ph.d., *Research Assistant in Horticulture*
Mary A. Tingley, b.s., *Graduate Assistant in Horticulture*
Joseph Naghski, b.s., *Graduate Assistant in Botany*
Willard R. Gillette, b.s., *Graduate Assistant in Botany*

ASSISTANTS TO THE STAFF

Henry B. Stevens, a.b., *Executive Secretary*
Marvin A. Miller, b.a., b.s., *Librarian*
Raymond C. Magrath, *Treasurer and Business Secretary*
Beatrice M. Richmond, *Bookkeeper*
John P. Neville, b.a., *Assistant Agricultural Editor*
Elizabeth E. Mehaffey, *Assistant Librarian and Mailing Clerk*
Betty G. Sanborn, *Seed Analyst and Secretary*
Helen H. Latimer, *Gas Analyst*
Maisie C. Burpee, *Secretary to the Director*

EXTENSION SERVICE

GENERAL EXTENSION STAFF

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Fred Engelhardt, ph.d., *President*
John C. Kendall, b.s., *Director*
Earl P. Robinson, b.s., *County Agent Leader*
Daisy D. Williamson, *State Home Demonstration Leader*
†Clarence B. Wadleigh, b.s., *State Club Leader*
Mary L. Sanborn, *Assistant State Club Leader*
Ann F. Beggs, *Extension Economist, Home Management*
Harry C. Woodworth, m.s., *Extension Economist, Farm Management*
Kenneth E. Barraclough, b.s., *Extension Forester*
Max F. Abell, ph.d., *Assistant Economist, Farm Management*
Edson F. Eastman, b.s., *Extension Dairyman*
Hazel E. Hill, b.s. in ed., *Extension Specialist in Clothing*
Elizabeth E. Ellis, b.s., m.a., *Extension Nutritionist*
Lawrence A. Dougherty, b.s. in agric., *Extension Economist in Marketing*
Cecil O. Rawlings, b.s., *Extension Horticulturist*
R. Claude Bradley, ph.d., *Extension Poultryman*
Walter T. Ackerman, b.s., b.s.a.e., *Agricultural Engineer*
Samuel W. Hoitt, m.s., *Assistant State Club Leader*
Clyde N. Hall, b.s., *Assistant Extension Dairyman*
Nancy E. Carlisle, b.s., *Home Demonstration Agent at Large*
Jay L. Haddock, m.s., *Extension Agronomist*
Warren H. Rogers, b.s., *County Agent at Large*
Alan G. MacLeod, m.a., *Assistant Economist in Marketing*
Perley F. Ayer, b.s., *Specialist in Rural Organization and Recreation*
Clarence S. Herr, m.s., *Assistant Extension Forester*
Stanley E. Wilson, b.s., *Assistant in Poultry Improvement and Horticultural Improvement*

COUNTY AGRICULTURAL AGENTS

Howard N. Wells, *Sullivan County*
W. Ross Wilson, b.s., *Grafton County*
James A. Purington, m.s., *Rockingham County*
Daniel A. O'Brien, *Coös County*
Edward W. Holden, b.s., *Merrimack County*
Everett W. Pierce, b.s., *Hillsborough County*
Eloi A. Adams, b.s., *Strafford County*
Royal W. Smith, b.s., *Belknap County*
Errol C. Perry, b.s., *Carroll County*
Cornelius J. Ahern, b.s., *Cheshire County*

*** May 23, 1936—April 1, 1937.**
† Leave of absence March 1—August 31, 1937.

THE EXTENSION STAFF

COUNTY HOME DEMONSTRATION AGENTS

††Miriam F. Parmenter, *Cheshire County*
Myrtis E. Beecher, *Hillsborough County*
Rena Gray, B.S., *Belknap County*
Una A. Rice, B.S., *Grafton County*
E. Alice Melendy, B.S., *Carroll County*
Hope A. Dyer, B.S., *Sullivan County*
Grace H. Smith, B.S., *Strafford County*
Anita N. Babb, *Rockingham County*
Eleanor Wiliamson, B.E., *Coös County*
Mabel A. Lash, B.S., *Merrimack County*

COUNTY BOYS' AND GIRLS' CLUB AGENTS

Kenneth E. Gibbs, B.S., *Hillsborough County*
Stanley W. DeQuoy, *Grafton County*
Elizabeth Bourne, *Rockingham County*
Norman F. Whippen, B.S., *Sullivan County*
Paul J. Dixon, B.S., *Carroll County*
Elizabeth R. Roper, B.A., *Strafford County*
*Ruth C. Weston, B.A., *Cheshire County*
Alden H. Mead, B.S., *Coös County*
Wilfred G. Purdy, M.S., *Merrimack County*
County
Irene E. Jewett, B.E., *Assistant County Club Agent in Grafton County*
Hazel A. Colburn, B.S., *Assistant County Club Agent in Hillsborough County*
Clifford C. Ellsworth, B.S., *Assistant County Club Agent in Rockingham County*
James P. Edney, B.S., *Acting County Club Agent in Cheshire County*
Vera M. Ford, B.S., *Assistant County Club Agent in Merrimack County*

ASSISTANTS TO THE STAFF

Henry B. Stevens, A.B., *Executive Secretary*
Raymond C. Magrath, *Treasurer and Business Secretary*
Beatrice M. Richmond, *Bookkeeper*
John P. Neville, B.A., *Assistant Agricultural Editor*
John W. Spaven, B.S., *Executive Assistant*
Elizabeth E. Mehaffey, *Assistant Librarian and Mailing Clerk*
Maisie C. Burpee, *Secretary to the Director*

†† Leave of absence, September 1, 1936—August 31, 1937.
* Acting County Club Agent, Belknap County, September 1, 1936—June 30, 1937

HISTORICAL SKETCH

The University of New Hampshire was incorporated by an act of The General Court of New Hampshire on May 4, 1923. The new corporation included the old corporation known as the New Hampshire College of Agriculture and the Mechanic Arts, a College of Technology and a College of Liberal Arts. The act of incorporation took effect on July 1, 1923. Under the provisions of the act the trustees of the New Hampshire College of Agriculture and the Mechanic Arts became the trustees of the University of New Hampshire.

The administration of the University is vested in a board of thirteen trustees, of which the Governor of the State, the Commissioner of Agriculture, and the President of the University are *ex officio* members. The alumni elect two trustees, and the others are appointed by the Governor with the advice and consent of the Council.

The original corporation, the New Hampshire College of Agriculture and the Mechanic Arts, was created by an act of the Legislature in 1866 and was established at Hanover as a state institution in connection with Dartmouth College. The year 1866 saw the entrance of the first class. Before the college was founded, the Legislature of 1863 had accepted the conditions of an Act of Congress of July 2, 1862, entitled, "An act donating public lands to the several states and territories which may provide colleges for the benefit of agriculture and the mechanic arts."

In 1893 the college was moved from Hanover to Durham. This action followed the death of Benjamin Thompson, a farmer of Durham, who died January 30, 1890, and left to the college, with the exception of a few minor reservations, his entire estate. The Legislature accepted this bequest March 5, 1891, and appropriated the necessary money for the first buildings.

Shortly before the State accepted Mr. Thompson's gift the Legislature further provided for the college by accepting the provisions of Congressional legislation known as the Morrill Act. This legislation made available federal appropriations "for instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction."

Although the college was able to make use of the Thompson land as early as 1893, it was not until 1910 that the income from the endowment of almost $800,000 became available. At present the college has an annual income from the Thompson fund of nearly $32,000. It also receives moneys which are available as the result of the acts of Congress referred to, and a yearly appropriation from the State amounting to one mill per dollar on the assessed valuation of all taxable property.

Although engineering instruction had been carried on in a division of engineering from the founding of the college, the work became unified and specialized when the College of Technology became one of the administrative units of the University in 1923.

Study of the liberal arts had been offered before the change of nomenclature of the corporation in 1923. The University of New Hampshire included a College of Liberal Arts, intended to care for the students who desire preparation for life in fields other than agriculture and engineering.

Graduate study, although not new to New Hampshire, as it had been carried on for some time under the direction of a faculty committee, was definitely organized in 1928 as a Graduate School.

A branch of the University, known as the Agricultural Experiment Station, was established by the State August 4, 1887, under the terms of an Act of Congress passed in March of that year. Its purpose is to acquire agricultural knowledge and to bring its information to the people of the State. The station is actively engaged in this work not only in Durham but throughout the commonwealth. Members of the faculty of the College of Agriculture serve on the station staff.

In addition to its functions of teaching resident students and conducting research investigations, the University has developed its function of carrying information and assistance in agriculture and home economics into all parts of the State. Funds appropriated for the University by acts of Congress and the Legislature provide the means for promoting this type of work.

SITUATION

Durham, the home of the University, is an attractive village on the Portland division of the Boston and Maine railroad, sixty-two miles from Boston, fifty-four from Portland, and five from Dover, a city of 15,000 population. Good train service and excellent trunk-line motor roads make the University easily accessible from all parts of the state.

Durham, organized in 1732, is one of the historic towns of New Hampshire. In the early days it was the home of a prosperous ship-building industry. Situated at the head of tidewater on the Oyster River, it served as a distributing center for the interior of the state. During the Revolutionary War it was famous as the home of Major General John Sullivan. Near his home, in the village, the state has erected a fitting monument to his memory.

FACILITIES FOR INSTRUCTION

BUILDINGS FOR ADMINISTRATION AND INSTRUCTION

Thompson Hall, the general administration building, was built in 1893 and is named for Benjamin Thompson of Durham, the greatest individual benefactor of the College and University. It contains the office of the President and the offices of other general administrative officers, and also affords classroom and laboratory facilities for work in physical education for women, zoölogy, entomology, and home economics.

Conant Hall, also built in 1893, is named for John Conant of Jaffrey, an early and generous friend of the College. This building, originally constructed to house scientific departments, gradually became during the passage of years the headquarters of the department of chemistry. It was in this building that Professor Charles James accomplished his researches in the rare earths and minerals. Upon the completion of Charles James Hall in 1929, this building was largely given over to civil engineering and geology .

Nesmith Hall, another one of the four original buildings erected in Durham in 1893, is named for Judge George W. Nesmith of Franklin, who was active as president of the Board of Trustees from 1877

to 1890. This small building was enlarged and renovated in 1933 and now houses the departments of botany and agricultural economics.

Shops, originally constructed in 1893 and enlarged during and immediately after the World War, provides facilities for the department charged with the maintenance of the buildings and grounds. This building also houses practical laboratory work in mechanical engineering, and in one section provides space for practical instruction and research in the handling and storage of horticultural products.

Morrill Hall, built in 1902, is named for Senator Justin Morrill of Vermont, sponsor of the Land Grant Act. This building serves as headquarters of the College of Agriculture, and contains also the office of the director of Experiment Station and the Extension Service. In this building are the laboratories and classrooms of the departments of agronomy, animal husbandry, horticulture, poultry husbandry, forestry, and offices for agricultural extension and station staff members.

Armory and Gymnasium, erected in 1906, contains a large drill hall and gymnasium and provides space for the offices of the departments of physical education and athletics and military science and tactics. In the basement facilities are provided for showers and lockers and for the storage of military and athletic equipment.

Hamilton Smith Library was erected in 1907 with a union of funds left by Hamilton Smith of Durham for the erection of a town library building and funds from the Carnegie Corporation and the State of New Hampshire. The library serves not only the faculty and students of the University but also the residents of the town of Durham, being one of two such libraries in the United States so constituted, and because it is the library of the state university, it serves as far as possible the people of the State of New Hampshire.

Dairy Building, constructed in 1910, is arranged and equipped for purposes of dairy instruction. It contains equipment usually found in an up-to-date dairy and affords splendid opportunities for the study of all phases of the dairy industry.

DeMeritt Hall, provided in 1914, is named for Albert DeMeritt of Durham, a long-time friend and staunch supporter of the College. It serves as the headquarters of the College of Technology and affords lecture, recitation, laboratory and office rooms for the departments of mechanical engineering, electrical engineering, physics, and architecture.

MURKLAND HALL, built in 1927, is named for Charles Sumner Murkland, President of New Hampshire from 1893 to 1903. It provides classroom and office facilities for the majority of the departments of the College of Liberal Arts. It houses the departments of economics and accounting, English, languages, mathematics, sociology, philosophy and psychology, history, and political science.

CHARLES JAMES HALL, dedicated in 1929, bears the name of Charles James, Professor of Chemistry at New Hampshire from 1906 to 1928. This structure houses the department of agricultural and biological chemistry and the department of chemistry. It provides lecture and recitation rooms and laboratories for instruction and research in both of these departments.

BALLARD HALL, originally constructed in 1905 and acquired by purchase in 1914, affords office and classroom facilities for the departments of education and music, accommodations for Christian Work, Inc., and offices for student organizations.

RESIDENTIAL HALLS

COMMONS was erected in 1919 and enlarged in 1925. It contains the freshman dining hall, a faculty dining room, a cafeteria, a trophy and lounge room, rooms for meetings of student organizations, and provides on the third floor dormitory facilities for a limited number of undergraduate men.

FAIRCHILD HALL, erected in 1916, honors Edward Thomson Fairchild, President of New Hampshire from 1912 to 1917. It is a brick structure of colonial design and furnishes accommodations for 150 undergraduate men.

EAST AND WEST HALLS were erected by the United States Government in 1918, in order to furnish housing facilities for troops in training at the College during the World War. These buildings have since been partitioned into moderate-sized rooms and provide desirable accommodations and comfortable quarters at low cost for 230 men.

SMITH HALL was originally constructed in 1908 with funds made possible by the generosity of Mrs. Shirley Onderdonk of Durham, who made this provision as a memorial to her mother, Mrs. Alice Hamilton Smith. The original building and an annex constructed in 1918 furnish desirable rooming facilities for 68 women students.

Congreve Hall was built in 1920 with funds made available through the will of Mrs. Alice Hamilton Smith of Durham, and bears the name of a family intimately connected with Mrs. Smith's ancestry. The original building and a wing erected during the summer of 1922 accommodate 100 undergraduate women.

Hetzel Hall, built in 1925, is named for Ralph D. Hetzel, President of New Hampshire from 1917 to 1927. It is the newest men's dormitory on the campus and accommodates 156 undergraduate men.

Scott Hall, completed in 1932, is named for Clarence Watkins Scott, Professor of History at New Hampshire from 1879 to 1930. This building furnishes comfortable accommodations for 120 undergraduate women.

Elizabeth Demeritt House, erected in 1931, named for Mrs. Elizabeth P. DeMeritt, Dean of Women from 1919 to 1931, is a new and well-furnished practice house for use by students in home economics.

Charles Harvey Hood House, an infirmary and rest house erected in 1932, is the gift of Mr. and Mrs. Charles Harvey Hood of Boston. It was erected and will be maintained by funds presented to the Trustees in 1930, the fiftieth anniversary of Mr. Hood's graduation from New Hampshire. Hood House, designed and furnished in a cheery, homelike style, is unusually well equipped to care for sick and ailing students and teachers. It will accommodate normally thirty patients in both wards and private rooms. The office of the University Physician and quarters for three trained nurses are also located in Hood House.

Lewis Fields, outdoor recreational center, dedicated October 10, 1936 in honor of Dr. Edward Morgan Lewis, President of the University from 1927 to 1936, include six fields for football, soccer, lacrosse, and four baseball diamonds for alternate use with some of the aforementioned, a first-class cinder track with a 220 yard straightaway and pits and runways for jumping and vaulting, fourteen composition and six clay tennis courts, concrete bleachers seating 1750 spectators at baseball games and concrete stands seating 5000 spectators at football and track and field contests. The entire equipment was built in cooperation with Federal work-relief agencies. Materials used in the construction of the main field stands were provided by alumni of the University as the first project of the

Alumni Fund. The varsity baseball field on Lewis Fields is known as Brackett Field, in honor of William H. L. Brackett, '14, prominent student leader of his college generation who died from wounds received during the World War.

Other buildings on the campus include the President's House, a substantial, attractive building erected in 1904 to provide a residence for the President and his family; the Power Plant, equipped for heating the buildings of the institution; the Greenhouses, which provide facilities for botanical and horticultural research and instruction; the several large and well-equipped farm buildings adapted to the needs of the College of Agriculture; and a frame dwelling used for instruction in the care and nurture of children of pre-school age.

EQUIPMENT

Agronomy and Agricultural Engineering.—For farm crops work, this department has a very complete collection of dried specimens of the different forage crops, and of the more important varieties of corn, wheat and oats. Seed testing apparatus, grass charts, and other illustrative material form a part of the equipment.

The lecture room is equipped with a combined lantern and reflectoscope, together with a large number of lantern slides.

A new soil physics laboratory contains soil bins, chemical and torsion balances and various kinds of physical apparatus for the study of soils, including that for the determination of specific gravity and for the making of mechanical analyses.

The farm, with its 1,300 acres of land, has a variety of soils suited for the growth of various farm crops.

For instruction in agricultural engineering improved facilities are provided by the use of two and one-half floors in a building measuring 45 feet by 98 feet which contains laboratories for the study of farm equipment, building construction and maintenance, and other engineering problems related to farm enterprises. Four to six makes of tractors are available in the tractor laboratory; several types and sizes of stationary engines and light plants are provided in the gas engine laboratory. Considerable space is devoted to a large variety of representative makes of modern field machinery for study of machine methods, selection, care, adjustment and operation.

Facilities for instruction in electrical farm equipment and methods

of operation are provided. In the electric farm power laboratory for rural electrification are available many electrical appliances especially developed for agricultural use.

Tools and facilities are provided for the care, adjustment and operation of equipment, and a modern farm shop is employed in the instruction in repair work.

Drainage levels for laying out drains, plane tables for mapping plots of land, polar planimeters for measuring plotted areas, steel tapes, chains, range poles, etc., are available for practical work in farm surveying, mapping and drainage problems.

A dynamometer, apparatus for studying draft problems, and many measuring, recording and other instruments of the experiment station are available for technical, as well as practical, class instruction.

Animal Husbandry.—The stock barn is thoroughly equipped with modern appliances, and houses an excellent herd of pure-bred Shorthorns, several Herefords, small flocks of pure-bred Shropshire and Dorset sheep, and a well-bred Percheron stallion.

The piggery accommodates a herd of Chester White hogs. All animals are used for instructional purposes.

The classroom is equipped with various anatomical models, charts, and lantern slides, and an up-to-date livestock library is available for student use.

Herd books of the most prominent breeds are used for the purpose of familiarizing students with the methods of tracing pedigrees and with the practices of breeders' associations.

Architecture.—The department of architecture is well equipped to meet the needs of the courses offered. The drafting rooms are supplied with tables and lockers, and the free-hand studio with suitable stands and easels. For free-hand drawing there is a good supply of geometric models, and for advanced work in charcoal drawing the nucleus of a good collection of plaster casts exists, consisting of historic ornament, details of plant and animal life and of the human form. For special work in this subject there is available the museum of casts, consisting of examples of antique and modern sculpture. For work in architectural drawing an excellent library of books, periodicals, and blue prints of all classes of buildings are available for reference and use in the drafting rooms, while a goodly collection of samples of building materials is being added from time to time.

Botany and Bacteriology.—The department has laboratories and greenhouses equipped for work in general botany, pathology, physiology and bacteriology and a working library of 2,000 volumes. Ample facilities are provided also for advanced work because of the affiliation of the department with the experiment station. The bacteriology laboratory is equipped for work in general and applied bacteriology, and opportunity is provided also for advanced work.

Chemistry.—The departments of chemistry and agricultural chemistry occupy the new building, Charles James Hall. Laboratories, equipment and recitation rooms, entirely modern in every respect, are provided for instruction in all fundamental courses. In addition ample facilities are available for advanced instruction and research work in inorganic, analytical, physical, and organic chemistry.

Civil Engineering.—The civil engineering department is located in Conant Hall. The offices and the drafting, recitation, and lecture rooms are on the first floor, and the instrument rooms and laboratories for material testing and highway investigation are in the basement. The hydraulic laboratory, in the basement of DeMeritt Hall, is used by the civil engineering department for instruction and experimentation. The department is well equipped with transits, levels, plane tables, and current meters for plane, topographic and hydrographic surveying.

Dairy Husbandry.—The dairy husbandry laboratories, located in the dairy building and in the dairy barn, are well equipped for instructional purposes. The equipment includes power churn, power separator, pasteurizers, coolers, ice cream freezers, bottler, two mechanical refrigeration units and homogenizer. The milk testing and bacteriological laboratories have equipment necessary for milk testing and inspection, and dairy bacteriology.

The University dairy herd is made up of representatives of the Ayrshire, Guernsey, Holstein and Jersey breeds.

A new dairy barn unit, completed in the spring of 1932, provides accommodations for some 120 dairy animals. This unit consists of the following: main barn, for 60 cows; wing, for bulls, calves and young stock; isolation barn; dry cow and young stock barn, for 50 head; combine milk room; milk house, with equipment for cooling, bottling and storing milk, and for washing and sterilizing bottles and equipment.

Electrical Engineering.—The laboratories for electrical engineering are located in DeMeritt Hall. The main laboratory is used for testing electrical machinery, and contains a large distribution switchboard on which are mounted instruments, switches, circuit breakers, and plugging devices. These devices are so arranged that by making the proper connections thereto, direct current and alternating current can be supplied to the various panels in the laboratory and to the lecture rooms in the building. In addition to this main laboratory there are others devoted to communication and storage batteries.

The general equipment includes direct and alternating current generators and motors, transformers, rectifiers, rotary converters, telephone, telegraph and radio communication equipment, demonstration equipment, storage batteries, and the necessary measuring instruments adapted to the needs of students taking this course.

The lecture room of the department is connected directly with the switchboard in the main laboratory and is equipped with such apparatus as is needed to supplement lectures with demonstrations.

Farm.—The College of Agriculture has a large, well-equipped farm. It serves as a laboratory for much of the instruction in agriculture where approved methods and practices may be seen and where many students may gain experience by actually performing the work with their own hands.

The several farms of the University total about 1,305 acres. Of this area about 154 acres are devoted to the campus and athletic fields; about 275 acres are used for hay, tillage, orchards and gardens; about 558 acres are forest, wood and brush land; about 300 acres are in pasture; and about 18 acres in ponds.

Forestry.—Durham is well situated with reference to the study of woodlot forestry. All types of native second-growth forests are found near by, and the college owns a tract of 50 acres of old-growth timber and 500 acres of second-growth. A nursery for the growing of seedling forest trees has been established. To give an insight into the problems of large-scale forest management, the summer camp is located in the White Mountain National Forest, which has an area of over 500,000 acres.

The necessary instruments for making forest maps and measurements, together with collections of wood specimens, lantern slides and photographs, are available in connection with this work.

Geology.—The geology department, located on the second floor of Conant Hall, offers courses in structural and dynamic geology, physiography, mineralogy, economic geology, and paleontology. The lectures in these courses are supplemented by laboratory exercises and field trips.

The working equipment of the department includes numerous topographic and geologic maps, and a fairly complete collection of minerals, rocks and fossils. Microscopes are available for problem work in mineralogy, petrology, and paleontology. The departmental museum displays a wide variety of geological specimens and contains the Hitchcock collection, the Clough collection, and a portion of the Exeter Historical Society collection.

Few areas present such a wide variety of geological phenomena as the country in and about Durham. Features such as mountain and continental glaciation, marine erosion and deposition, vulcanism, orogeny, and metamorphism, are well shown.

Home Economics.—The home economics department has two offices and three large classrooms in Thompson Hall, a thoroughly modern home management house, and a nursery school-kindergarten. The food laboratory consists of a small unit dining-room and a working area equipped with individual desks and cupboards for utensils and supplies. The clothing laboratory is equipped with tables, cupboards, various types of sewing machines and has a fitting room. The third classroom is equipped for weaving and textile study and contains a delineascope.

The Elizabeth DeMeritt House, maintained for practice in home management, is a modified Cape Cod cottage, thoroughly equipped with modern household devices and furnished to illustrate various types of treatment in keeping with its style. It will house eight resident students and two instructors.

The Durham Kindergarten and Nursery School is located in a cottage house at the rear of Smith Hall. It is furnished with the necessary equipment to maintain the school as a laboratory for child care and training.

The Library.—The Hamilton Smith Library, by virtue of an agreement between the Town of Durham and the then New Hampshire College in 1907, contains not only the books belonging to the Univer-

sity but also those of the Durham Library Association, the Durham Public Library and the New Hampshire Agricultural Experiment Station.

The library collection includes 88,000 bound volumes. One thousand periodicals, continuations and proceedings of scientific societies are received currently. The library is a depository for United States government publications. The main collections are housed in the Hamilton Smith Library. The volumes of the New Hampshire Agricultural Experiment Station are kept in Morrill Hall. Seventeen department libraries are maintained for the departments of the Colleges of Agriculture and Technology. Periodicals appropriate to the department libraries are sent there.

The library publications include *The Library Handbook* containing information, directions for the use of the library and library tools, and library regulations; and the *Library Lantern*, a monthly news bulletin about books and libraries. These are free.

The library attempts to provide all books needed for reading and research save the individual texts adopted for the various courses; to provide recreational reading of a wide and varied character, including current, ephemeral and standard material of value; and to add gradually to its collections of the classics, serial sets, research and reference works.

Mechanical Engineering.—This department is located in DeMeritt Hall. On the second and third floors are the advanced drawing and designing rooms. In addition to these drafting rooms there are two lecture rooms, and department offices. One of the lecture rooms is equipped with a motion picture machine and stereopticon lantern for illustrated lectures.

In the basement are located certain of the mechanical engineering laboratories, one of which is the laboratory equipped with the apparatus for making analyses of flue gases, for calorimetric determinations of the heat values of solid and liquid fuels, and for conducting the usual work in heat treatment of steel. Apparatus needed in determining the viscosity and flash points of lubricants as well as an oil testing machine for determining the lubricating and wearing qualities of lubricants is located in the automotive laboratory in the Shops. Materials testing machines of this department are located in the basement of Conant Hall.

The main room of the DeMeritt laboratories is given over to the testing of steam, gas and hydraulic machinery as well as of air compressors, air conditioning, refrigeration and heat transfer apparatus. This laboratory is equipped with machinery needed for such testing. There is also an ample supply of other apparatus needed in conducting various tests and doing research work in various lines.

The new heating plant has been designed to serve also as a steam laboratory for this department.

Aëronautical equipment and internal combustion engines are located in the automotive laboratory at the rear of the Shops.

The wood shop is fully equipped with modern woodworking equipment.

The equipment of the machine shops consists of the modern apparatus found in an up-to-date commercial shop, and a large number of small tools, including micrometers, calipers and gauges necessary for accurate work. This shop was entirely remodeled and equipped with new lathes in 1931.

The forge shop is equipped with down-draft forges and all necessary tools. This shop was entirely remodeled and new down-draft equipment installed in 1931.

Military Science.—Recognizing in military training a source of physical, mental, and moral development for the individual and a future safeguard for the nation, the University maintains two units of the Reserve Officers Training Corps. This corps, described in later pages, is made up of units at 125 principal educational institutions in the country. It was organized by Congress in 1916 to provide systematic military training in civil institutions and to train specially selected students as reserve officers in the military forces of the United States.

The training of the corps is under the supervision of the Secretary of War. Officers and non-commissioned officers of the Regular Army are detailed at the University to conduct this training. The War Department loans all the necessary equipment of the latest type, so that with the exception of a few text-books required by students, members of the R.O.T.C. are put to no expense for arms or equipment.

In addition to the infantry and artillery equipment furnished by the government, there are a 75-foot indoor gallery practice rifle range, a 1,000-inch outdoor machine gun range, and a 50-yard outdoor pistol range available for the use of students. The rolling country in the vicinity furnishes opportunity for extended order drill and field exercises, and the athletic fields for close order drill.

The cadets wear, when on duty of a military character, a uniform furnished by the War Department.

Upon the graduation of each class, those students who have satisfactorily completed the course receive commissions as second lieutenants in the Officers Reserve Corps of the United States Army.

Physics.—The department of physics is housed in the west end of DeMeritt Hall. In the basement are located the introductory physics laboratory with apparatus room, an electrical measurements laboratory, a switchboard hall, a storage room and a suite of dark rooms to accommodate students in photography. On the first floor are located the general physics laboratory and apparatus room, a recitation room and the department office. On the second floor is located the lecture room, with adjoining apparatus room.

Instruction in physics is given primarily by recitations and laboratories, with frequent lectures, examinations, written reports and personal conferences. The aim of the department is to develop student minds capable of doing independent thinking in the science of physics. There is a small but well chosen collection of apparatus for use in laboratories and lectures.

Poultry Husbandry.—The equipment of the poultry plant consists of a permanent laying house for 1,000 birds; a laying house for 750 birds, one unit of which is equipped with 480 laying cages; a long type special-pedigree mating house of fourteen pens; a permanent long type brooder house capable of brooding 5,000 chicks; battery brooder rooms with a capacity of 4,000 chicks to broiler age; an incubator cellar containing cabinet type incubators of 1,400-egg and 8,000-egg capacity, as well as several small machines for student instruction. A unit of six colony brooder houses is also available for student practice work.

Improved range facilities are now available consisting of four permanently-fenced areas, each of approximately ten acres, for chickens, and additional areas for turkeys.

The poultry flock consists of Barred Plymouth Rocks, Single Comb White Leghorns and New Hampshires, also representative units of Bronze turkeys, White Pekin ducks, and Toulouse geese.

The poultry plant is operated for instructional and research purposes. Experiments are constantly in progress in nutrition, breeding, brooding, management and diseases.

A special poultry pathology laboratory is maintained for diagnosis

and research in poultry diseases. This laboratory is available for student instructional purposes.

Zoölogy.—The University is favorably situated geographically for the study of zoölogy. Within a few minutes' walk of the laboratory, the Oyster River meets the tide water from Great Bay. This furnishes a graduation of salt, brackish and fresh water with an abundance of their characteristic fauna. On the other hand, there are numerous bodies of fresh water, with typical fresh water forms.

The department of zoölogy is prepared to offer courses in systematic zoölogy, physiology, sanitation, philosophical zoölogy, and anatomical zoölogy.

The equipment for the work in systematic zoölogy consists of a well-lighted laboratory, provided with tables, charts, dissecting and compound miscroscopes. All of the latest books and periodicals on systematic zoölogy are at the student's disposal.

The proximity to both salt and fresh water renders the work in advanced systematic zoölogy unusually attractive. In addition to the regular collecting equipment, nets, aquaria, etc., advanced students also have the use of rowboats and a gasoline launch.

In the work in physiology, hygiene and sanitation, the department is provided with an unusually fine collection of injected preparations of the human body, and with numerous charts.

For work in evolution and experimental zoölogy the department has a very complete library. Studies in ecology in Great Bay and vicinity are encouraged, for which purpose the students have the use of camera equipment. In addition to the study of evolution under natural conditions the department also furnishes aquaria for laboratory study and experiments.

The work in anatomical zoölogy is greatly facilitated by an abundance of fresh material which may be collected as needed. For the study of human and comparative anatomy a full set of skeletons and preserved material is provided. Students interested in histology have access to a private collection of some two thousand microscope slides.

Museum.—The museum had for a nucleus the collection made during the state geological survey. To this, additions have been made from various sources. Specimens are being collected to illustrate the zoölogy of New Hampshire, and New Hampshire collectors and naturalists are invited to make the museum the permanent depository of their collections.

GENERAL INFORMATION

EXPENSES

Estimate of Freshman Expenses

	High	*Average*	*Low*
Room (Dormitories)*	$120.00	$80.00	$64.00
Board (at Commons)	200.00	200.00	200.00
Tuition**	150.00	150.00	75.00 and a scholarship
Uniform†	.....	.....	.....
Books	35.00	35.00	35.00
Laundry	35.00	20.00	15.00
Incidentals††	100.00	60.00	50.00
Total	$640.00	$545.00	$439.00
Expenses, First Semester	$340.00	$275.00	$230.00

Tuition—Four-Year Students.—Tuition is $150 a year for residents of New Hampshire and $250 for non-residents. Tuition is paid in advance in two equal installments, one on the first day of each semester. Students who find it difficult or impossible to procure the necessary funds for payment on the regular registration day may make arrangements acceptable to the Treasurer for a series of payments during a semester.

A diploma fee of $5 is charged upon graduation. Charges will be assessed for extraordinary breakage or damage. No laboratory or course fees are charged. Payment of the tuition entitles the student (four-year, two-year) to admission to all home 'varsity athletic contests.

* See bulletin on Residential Halls.

** If not a resident of New Hampshire add $100 to high and average and $175 to low. If a resident and not a holder of a scholarship, add $75 to low.

† Uniform for members of the Reserve Officers' Training Corps is provided by the Federal government. A deposit of $15 is required of each student to whom military equipment is issued.

†† Expenses for travel, clothing, etc., vary with the individual student, and should be added. The Student Activity Tax, authorized by vote of the undergraduate students, with the approval of the Board of Trustees, is paid by each undergraduate to a duly authorized delegate of the Associated Student Organizations at the time of registration. The University Business Office will require evidence of the payment of the tax before registration receipt is issued. The revenue from the tax provides each student with *The New Hampshire,* semi-weekly newspaper; *The Granite,* University annual; student government and class activities. During 1936-37, the tax was $3.65 for men students and $4.50 for women.

Tuition—Two-Year Students.—Tuition for two-year students in agriculture is $75 for residents of New Hampshire and $175 for non-residents. Tuition is payable in advance in two equal installments, one on the first day of each semester.

Books.—Students may purchase books, drawing instruments, materials, etc., at the University Bookstore in Thompson Hall.

Rooms.—The University has three dormitories for women and five for men. *Men of the upper classes may reserve rooms in Hetzel, Commons, and West Halls. East and Fairchild Halls are reserved for men of the freshman class. Certain rooms in Hetzel Hall, not taken by upperclassmen, may also be available to freshmen.* All rooms are heated, lighted and furnished. Bed linen, quilts and towels, however, are provided by the individual student. Each women's dormitory is equipped with a laundry. A service room is provided in each dormitory where grills and irons may be used with safety. Prices range from $64 to $120 a year. Applications for rooms in the dormitories should be addressed to The Registrar, University of New Hampshire, Durham.

A Five-Dollar ($5.00) Room Deposit must accompany each application, this deposit to be forfeited if the room accepted is not occupied by the applicant. The deposit is held as a guarantee against breakage and will be returned at the close of the year or upon withdrawal.

Room rent is payable in advance in two equal installments, one on August 15th and one on registration for the second semester. Rooms reserved will be held only until August 15th unless one-half of the annual rent is paid before that date.

Rooms paid for and not occupied one day after registration may be declared vacant and the room rent returned, unless the individual holding the reservation makes a written request to the Registrar to hold the room until a later date. The advance payment for the room will not be returned to those making this special request. No room will be reserved more than ten days after the registration date. Early application is necessary in order to secure a choice of rooms. Rooms in private dormitories or families may be secured for about the same prices as for those in college dormitories.

Women students, unless living at home, are required to room in one of the women's dormitories, or in approved houses. A competent house director is in charge of each women's dormitory.

Board.—A Dining Hall is operated and supervised by the University for the accommodation and benefit of the students. All freshmen, whose homes are not located in Durham, are required to board at the University Dining Hall. The aim of the compulsory regulation is to insure a broad fellowship in the class, and to safeguard the health of the first-year students by offering skilled dietetic oversight in the selection and preparation of their food. The Dining Hall is equipped with the best appliances for cooking and serving on a large scale, and is subject to constant sanitary inspection by the University Physician. Board is $200 for the college year, payable $100 at registration for each semester.

The Dining Hall is not operated for profit. Savings made possible by reduced costs of operation are passed along to the students in the form of a reduced board charge in the second semester.

A cafeteria is open to all students of the upper classes who may desire to take advantage of the low price and the high quality of food available at the University Dining Hall.

Hood House.—The Health Department with the University Physician in charge is devoted to the prevention of sickness and the maintenance of the health and efficiency of the students. The Charles Harvey Hood House, a completely equipped and home-like infirmary and rest house, with a physician and trained nurses in charge, is available for use by all students.

Checking Accounts.—Students are earnestly urged to arrange checking accounts in their home banks or to place money on deposit in the Business Office until needed, in order to avoid possible loss resulting from keeping on hand considerable sums of money. Such banking arrangements will also facilitate payment of registration bills which are strictly due and payable on registration day. The Business Office will accept and cash student checks.

Self-Support.—A great many students earn their education in part by means of their own labor during summers and while in college.

All students and prospective students are advised, however, to carefully survey their individual physical strengths and scholastic aptitudes before committing themselves to the arduous combination of intensive study and part-time employment.

Students are urged not to count too much upon earning their way the first year, and should be sure of at least $400 *from other sources,*

a low estimate of the first year's expense. Inquiries from men concerning self-support should be addressed to the Bureau of Appointments, Durham, N. H.

Student Employment Committee.—In order to insure an equitable distribution of University part-time employment, a committee of the Faculty is charged with the responsibility of rating students for employment. The committee accepts no responsibility for the annual placement of students on jobs. Its only function is to try to see that only needy students are certified as eligible to hold positions. Application blanks, obtainable at the office of the Dean of the Faculty, must be filled out and each student rated before he becomes eligible for a University position. Applications for Federal aid work are also handled by the office of the Dean of the Faculty.

Bureau of Appointments.—The University Bureau of Appointments assists in finding opportunities for men students for employment in faculty homes and about the village of Durham. In the fall and spring months freshmen may secure work several afternoons a week doing such odd jobs or chores as taking care of lawns, gardens, furnaces, etc. By the end of freshman year they may reasonably hope to secure steady work, such as waiting on table, serving as janitor in one of the University buildings, etc.

Women Students.—Employment for women students, except for positions in the University offices or departments, is in the hands of the Dean of Women, and inquiries from women students should be addressed to her.

Freshman women are advised not to attempt to earn their room and board in private families unless they are in good physical condition and have excellent preparation for their University work.

UNIVERSITY AIDS TO STUDENTS

Scholarships.—A limited number of scholarships are awarded annually to deserving students. In order to grant scholarships equitably the University requires full information of all applicants relative to the necessity for scholarship aid. Scholarship application blanks will be provided upon request to the Dean of the Faculty.

These scholarships will be forfeited at any time for misconduct. A student placed on probation thereby forfeits his scholarship during the semester of probation.

A more detailed description of the several classes of scholarships follows:

SCHOLARSHIPS

State Scholarships.—To aid students who need and deserve financial assistance, the Trustees award 250 scholarships annually to residents of New Hampshire who have attended the University less than two semesters. Each scholarship pays $75 per year, and is good for one year only.

Applications for these scholarships must be returned to the Dean of the Faculty not later than July 15.

Recommendations for scholarships may be made by the subordinate and Pomona Granges, State Senators, State Federation of Women's Clubs, and citizens of New Hampshire.

Upon investigation and approval scholarships will be granted to those whose need appears to the committee to be the greatest.

Conant Scholarships.—These scholarships provided by the bequest of John Conant, of Jaffrey, pay $75 at present and are good for one year. By terms of the bequest they are open to men taking agricultural curricula and preference is given to residents of Cheshire County. Application should be made to the Dean of the Faculty.

Nancy E. Lougee Memorial Scholarships.—Since 1921 the interest on $5,000 bequeathed by Amos D. Lougee, of Somersworth, has been expended for scholarships of $75 each. They will be assigned each year and will be good for one year only. No applications can be approved without satisfactory evidence that the candidates *would be unable to attend without the aid of the scholarships.* Until July 15 of each year, preference will be given to residents of Strafford County. Application should be made direct to the Dean of the Faculty.

Valentine Smith Scholarships.—Through the generosity of Hamilton Smith of Durham, the sum of $10,000 has been given to establish the Valentine Smith Scholarships.

"The income thus accruing shall be given to the graduates of an approved high school or academy who shall, upon examination, be judged to have the most thorough preparation for admission."

These are the most remunerative endowed scholarships that the institution has to offer. They pay $100 a year and are good for four years if reasonable scholarship is maintained.

Competitive examinations for these scholarships will be held in Thompson Hall at the University, September 13 and 14, 1937. Examinations will commence at 8 A.M. on Monday. Contestants must present the usual credentials fulfilling the requirements for entrance, and must

pass examinations in English, American history, algebra (through quadratics), plane geometry and either physics or chemistry.

Requests for examinations should be forwarded to the Dean of the Faculty at least one week before the beginning of the examination period, and must state the names and addresses of the students, and the examinations desired.

Examinations are not restricted to residents of the state.

Class Memorial Scholarships.—In accordance with a communication presented to the Board of Trustees by the Alumni Association in 1922, each class upon graduation may establish a fund of $3,000, the interest of which will be used in payment of a class scholarship, to be awarded by a committee appointed by the President. The respective classes shall forward recommendations to this committee which will investigate such recommendations before awarding the scholarships.

Scholarships shall be limited to candidates of the highest moral standards, physically sound, and preference shall be given to those who require financial aid in order to continue their education, and shall be dependent upon the same factors as govern the holding of other scholarships as regards grades.

Eighteen classes, 1922 to 1940, are expected to establish these scholarships, and each scholarship shall be dedicated to the name of one of the eighteen New Hampshire men who died in the service of his country during the World War. Nine classes have established their scholarships to date.

They are: Forrest Eugene Adams Scholarship, Class of 1922; Paul Edward Corriveau Scholarship, Class of 1923; Pitt Sawyer Willand Scholarship, Class of 1924; George Downes Parnell Scholarship, Class of 1925; Cyril Thomas Hunt Scholarship, Class of 1926; Donald Whitney Libby Scholarship, Class of 1927 and family; Frank Booma Scholarship, Class of 1928; Earle Roger Montgomery Scholarship, Class of 1929; Fred Weare Stone Scholarship, Class of 1930.

Ralph D. Hetzel Interscholastic Debating Scholarships.—The Board of Trustees on December 20, 1926, set aside three scholarships each year (each for three years) to be awarded to the three interscholastic debaters who may qualify under regulations defined by the Interscholastic Debating League or by the University. These scholarships are limited to residents of New Hampshire.

Hunt Scholarship.—A special scholarship paying $75 has been estab-

lished by the Trustees at the request of the United States War Department for the benefit of soldiers, or sons and daughters of soldiers, in the United States Army. This scholarship is named in honor of Colonel William E. Hunt, '99, and Colonel Charles A. Hunt ,'01, who have rendered conspicuous and gallant service as officers of the Regular Army before, during and since the World War. This scholarship will be granted each year and will be good for one year only. Application should be made direct to the Dean of the Faculty. The application cannot be approved without satisfactory evidence that the candidate *would be unable to attend without the aid of scholarship.* Preference will be given to a New Hampshire soldier.

Concord Alumni Scholarship Fund.—The Concord Branch of Alumni of the University of New Hampshire has established a scholarship fund. In accordance with the suggestion of the Concord Branch, money paid in from year to year is employed as a part of the Student Loan Fund of the University. Ultimately, the principal and such interest as accrues will be transferred to a special scholarship fund.

Frank B. Clark Fund.—A trust fund of $10,000 has been provided by Frank B. Clark of Dover, N. H., the income of which is to be used for the purpose of assisting and encouraging needy and worthy students who are suffering from physical impairment or deformity.

"Students impaired by the loss of an arm shall receive prior consideration."

"The benefits of this gift are to be available to students in any secondary school or college except a secondary school or college which is under the direction or control of a church or religious affiliations or preferences, and with the further understanding that students at the University of New Hampshire shall be given prior consideration."

Dads'-Hetzel Scholarship Fund.—At the second annual Dads' Day at the University, the fathers present voted to establish a scholarship fund to be known as The Dads'-Hetzel Fund and subscribed $304. For the present this money will be employed as a part of the Student Loan Fund of the University. Ultimately the principal and such interest as accrues will be transferred to a special scholarship fund.

Edmund L. Brigham Scholarships.—The income of a trust fund of $4,812, provided by the will of Edmund L. Brigham, a member of the

Class of 1876, is divided into two scholarships of equal sums each to be known as the Edmund L. Brigham Scholarship. They will be awarded at the end of each year to the two members of the freshman class who under the pressure or necessity of having to earn a portion of their college expenses show either a constant improvement in scholarship, or a high scholastic average, or both.

New Hampshire Branch of National Civic Federation Scholarship.—From the income of a fund of $1,000, established in June, 1930, by the New Hampshire Branch of the National Civic Federation, a scholarship is to be awarded annually to the junior woman majoring in economics or business who, at the end of her junior year, by excellence of scholarship, character and promise of leadership, is judged to be most worthy. The Dean of the College of Liberal Arts and the two ranking members of the Department of Economics shall name the winner of this scholarship in each year.

S. Morris Locke Memorial Scholarship.—The income of a fund of $3,000 established by the late Mary D. Carbee of Haverhill, N. H., as a memorial to Mr. and Mrs. S. Morris Locke, shall be known as the S. Morris Locke Memorial Scholarship. This scholarship is to be awarded each year to the highest ranking junior majoring in chemistry, entomology, or in any work where the microscope or microscopic technique is largely employed, who has demonstrated outstanding qualities of application, industry and initiative in any of these fields of work.

Cogswell Scholarships.—Through the generosity of the Trustees of the Cogswell Benevolent Trust of Manchester there will be available to members of the Class of 1938, during their senior year, 20 scholarships of $200 each and 10 of $100 each. These scholarships will be given to members of the class whose general record of scholarship, attainments and conduct during the freshman, sophomore, and junior years are adjudged by a committee of the Faculty to be most worthy. The committee will scrutinize closely the record of the junior year, and will give weight not only to the general excellence of the scholarship record, but to growth and improvement as well. Prior consideration will be given by the committee to the achievements of the members of the class who are residents of the Town of Henniker and the City of Manchester.

Hood Scholarships.—Through the generosity of Charles H. Hood, '80, there are available to qualified students in the College of Agriculture whose aims are set definitely to promote farming as a life opportunity five scholarships of $200 each. These scholarships are awarded to students who maintain high standards of scholastic excellence, strong characters and, in case of competition, are assigned in preference to students who intend after graduation to take up work relating to farm milk production.

George H. Williams Fund.—The income of the fund of $9,900, bequeathed to the University by the late George H. Williams of Dover, New Hampshire, known as the George H. Williams Fund, shall be used to award scholarships to deserving and meritorious students of Dover. This income shall be divided into four annual scholarships of equal value. These scholarships, awarded for one year only and not renewable, will be granted to men and women students, residents of Dover, for either the sophomore or junior year. Eligibility shall depend upon character, meritorious scholarship, self-help and evidence of financial need. Application should be made to the Dean of the Faculty.

The Ordway Fund.—Through the bequest of Martha H. Ordway, of Hampstead, made in 1934, the income from $2,000 will be expended each year for the benefit of indigent students from Sandown or Hampstead, if any; otherwise for the benefit of other indigent students attending the University. Application should be made to the Dean of the Faculty.

Charles H. Sanders Fund.—The income from a bequest of $3000 from the estate of Charles H. Sanders, Class of 1871, provides a scholarship in memory of the first class to be graduated from the University in 1871, consisting of William P. Ballard of Concord, Lewis Perkins of Hampton, and Charles H. Sanders of Penacook. This scholarship will be awarded to a needy member of the Junior class who has excelled in scholarship or has shown marked improvement in his scholastic achievement during his first two years at the University. Application should be made to the Dean of the Faculty.

John N. Haines Scholarship.—The income from a fund of $2475 bequeathed by John N. Haines of Somersworth will be used to provide a scholarship for a deserving student of the University. Pre-

ference will be given to a student whose home is in Somersworth. Applications should be directed to the Dean of the Faculty.

C.M.T.C. Scholarship.—One of the 250 state scholarships already established by the Board of Trustees, will be awarded each year to a member of one of the Citizens' Military Training Camps in the First Corps Area selected from red, white, or blue students by the Commanding General of the First Corps Area. This scholarship, available to a freshman for one year only, will be awarded to a resident of the State of New Hampshire whose application for admission to the University has been accepted without condition and who needs help in order to attend the University. The scholarship will be awarded after August 15 of each year.

Distribution of Loan and Scholarship State Assistance Funds by the Student Aid Committee.—For the present "Cash Loans" will be granted to needy Juniors and Seniors and "Deferred Tuition Loans" to needy Sophomores. "Free Scholarships" and "Deferred Tuition Loans" will be granted to needy Freshmen and Two-Year Agricultural Students.

Exceptions to the above procedure may be made by vote of the Student Aid Committee.

Cash Loan Fund.—Money will be loaned to needy juniors and seniors who are economical in their expenditures and who are working to pay a portion of their expenses. These loans will bear interest at 2 per cent until graduation or withdrawal from the University, and 5 per cent after graduation or withdrawal and are payable as follows: $5 a month beginning one year after graduation or withdrawal; $10 a month beginning two years after graduation or withdrawal; $15 a month beginning three years after graduation or withdrawal; and a like sum each month thereafter until principal and interest are paid.

The John H. Pearson Trust.—In coöperation with the trustees of the John H. Pearson Estate, Concord, N. H., a student loan fund known as The John H. Pearson Trust has been established, and is administered under the conditions governing the University Loan Fund.

James B. Erskine Loan Fund.—In 1930, a bequest of Dr. James B. Erskine, of Tilton, provided a fund of $3,642 for loans to students; loans to bear interest at the rate of 5 per cent until paid. This fund will be reserved for members of the senior class.

S. Morris Locke Loan Fund.—Through a bequest of the late Mary D. Carbee of Haverhill, N. H., a fund has been created for loan purposes in memory of Mr. and Mrs. S. Morris Locke. The fund now totals $18,870.

R. C. Bradley Loan Fund.—The New Hampshire Poultry Growers Association has established a loan fund for loan assistance to undergraduates who have been in attendance at the University at least two years with preference given to seniors. Loans are open only to students majoring in Poultry Husbandry in the College of Agriculture and are based on character, scholarship, and need of financial assistance. Applications made to the Committee on Student Aid are approved by that committee with the advice of a committee selected by the directors of the Poultry Growers Association.

Deferred Tuition Loans.—In order to enable students to attend the University who would be unable to do so without the aid of a loan, the University may grant loans to be applied toward tuition up to $100 in each college year, except that freshmen holding free scholarships may borrow in addition not in excess of $25. These loans will bear interest at the rate of 2 per cent until graduation or withdrawal from the University, and 5 per cent after graduation or withdrawal, and are payable as follows: $5 a month beginning one year after graduation or withdrawal; $10 a month beginning two years after graduation or withdrawal; $15 a month, beginning three years after graduation or withdrawal, and a like amount each month thereafter until the loan is paid.

PRIZES

Bailey Prize.—To endow the prize formerly offered by C. H. Bailey, '79, and E. A. Bailey, '85, a fund is being created by winners of the prize, the income of which will continue the prize for proficiency in chemistry.

Erskine Mason Memorial Prize.—Mrs. Erskine Mason of Stamford, Conn., has invested one hundred dollars as a memorial to her son, a member of the class of 1893, the income of which is to be given to that member of the senior class who has made the greatest improvement during his course.

Interscholastic Debating Prize.—The University of New Hampshire Debating League was reorganized in 1921, and is under the direction

of the instructor in debating and public speaking in the University. Any secondary school of the state is eligible for membership. Preliminary contests are conducted at the schools, and a final contest is held at the University to determine the winner of the League. A prize cup is awarded in rotation to the winners. Other prizes, such as medals and certificates, are awarded to individual debaters from time to time.

Interscholastic Prize Speaking Contest.—This contest, for students of any accredited high school of the state (provided they have not already won the first prize in a previous year) was first held in May, 1912. Three prizes are provided by the University for the winners.

University Inter-Fraternity Scholarship Trophy for Men.—Through the generosity of Wilford A. Osgood, '14, who has donated trophies for similar purposes in the past, a plaque is donated which is to be awarded each year to that fraternity whose members have the highest scholastic standing as certified by the Registrar.

Diettrich Cup.—This cup was given by the class of 1916 in memory of Rosina Martha Diettrich, a member of that class, who died a few weeks before graduation. The cup is to be awarded each year to the girl who attains the highest scholarship in her junior year. The cup is to remain in her possession throughout her senior year and until the next winner is named.

The American Legion Award.—The New Hampshire Department of the American Legion as a mark of recognition of the University's contribution in the World War, and as an expression of its interest in national defense, offers yearly a medal to that man in the senior class who has attained the highest distinction determined by achievement in military science, athletics, and scholarship. The name of the winner will be inscribed on a trophy. This trophy, made possible by the generosity of the American Legion of this state, is to remain in the permanent possession of the University.

Bartlett Prize.—Former Governor John H. Bartlett, Hon. '20, of Portsmouth, N. H., offers a prize of $50 each year, to be awarded annually to that New Hampshire student, a member of the Junior class, who ranks highest in scholarship for the year among those young men who have earned at least one-half their expenses since entering the University. This prize was awarded first in June, 1921.

Chi Omega Prize.—Mu Alpha Chapter of Chi Omega awards an annual prize of ten dollars at Commencement to the undergraduate

woman student at the University who shall submit to the committee on award the best thesis on any subject dealing with problems of civic interest in sociology or economics. The title shall be approved by the head of the department concerned and the thesis shall be received, not later than June first, and graded by a joint committee composed of the heads of the departments of sociology, economics and English. If, however, no thesis is found by the committee to deserve the award, no prize shall be given.

Class of 1899 Prize.—The class of 1899 has given to the University a fund of $500, the income to be used as a cash prize to be awarded "by the Faculty to the senior who in their opinion has developed the highest ideals of good citizenship."

Phi Mu Medal.—The local chapter of Phi Mu offers a gold medal to a senior girl to be awarded on the following basis: 50 points for excellence in physical education, determined by both skill and the spirit in which the work is carried; the remaining 50 points must be attained by evidence of unusual scholastic capacity, democracy, loyalty, and helpfulness in college associations and activities. No candidate will be considered who does not have an average grade for her college work above 80.

Phi Sigma Prize.—In order to promote high scholarship in zoölogy and the allied sciences, the Phi Sigma national honor fraternity offers a prize of $25 to be awarded at Commencement to that senior who ranks highest in zoölogical courses throughout the entire four years of collegiate work. The amount of work carried in biology, together with the average grade in all other courses shall be considered in making this award. The prize has been offered each year since 1921.

Hood Prizes.—Through the kindly interest and generosity of Charles H. Hood of the class of 1880, the income of funds given to the University in 1921 and in 1924 will be used for the encouragement, aid, and benefit of deserving students.

In accordance with the suggestion of the donor, for the present the income will be expended as follows:

First. *Hood Achievement Prize.*—A gold medal will be awarded annually to that member of the senior class whom the members of the three upper classes choose as giving the greatest promise of becoming a worthy factor in the outside world through his character, scholar-

ship, physical qualifications, personal popularity, leadership and usefulness as a man among men.

Second. *Hood Dairy Prizes.*—A part of the Hood income will be devoted each year to paying a portion of the expenses of the members of a team or teams chosen for excellence in judging dairy cattle and sent to participate in intercollegiate or other dairy contests. Suitable medals will also be provided for the individual members of such teams.

Third. *Hood Supplementary Bequest.*—The income from this bequest will be used for the purchase of a suitably inscribed trophy to become the property of the University. The names of the winners of prizes in dairy cattle judging are to be inscribed annually upon this trophy which will thus serve as a permanent record to the institution of their skill and accomplishment.

The Fairchild Memorial Prizes.—In 1927 Mask and Dagger, the dramatic society of the University of New Hampshire, established two prizes of twenty-five dollars each to be awarded each year to the two seniors who have done the most to promote dramatics during their four years at the University. These prizes are given in memory of Edward T. Fairchild, late president of the University.

Thomas J. Davis Prize.—By gift of Thomas J. Davis, Duluth, Minn., a native and former resident of Durham, a fund has been provided for the establishment of dairy and household science prizes as follows:

First. For competitive judging of dairy cattle by "short course students," excluding all four-year students, and allowing a suitable handicap in favor of students who are taking a course of not more than four months.

Second. To young women taking a short course for competitive bread baking as a half unit and for dairy butter making as another half unit.

Locke Prize.—The income of a trust fund of $3,000 bequeathed by the late Mary D. Carbee of Haverhill, N. H., as a memorial to Mr. and Mrs. S. Morris Locke, will be awarded at the end of each year to that junior majoring in Latin, who is adjudged by a committee of the Faculty to have excelled in the study of that language. In awarding the prize the committee shall give weight not only to the average grade in

Latin, but also to the general record of scholarship, other attainments and character.

Alpha Xi Delta Cup.—A cup will be awarded annually by the Alpha Xi Delta sorority to the senior girl who proves herself to be the best athlete in her class. The cup will be awarded on consideration of the following qualifications: good sportsmanship, physical fitness, athletic achievements, and superior skill. The cup will be awarded by a board of judges including the members of the department of physical education for women, the president of the Association of Women Students and the president of the Women's Athletic Association.

Mask and Dagger Achievement Prizes.—In 1929 and in 1930, Mask and Dagger established two annual prizes of twenty-five dollars each to be known as the Mask and Dagger Achievement Prizes. These are awarded each year to the seniors who, during their college courses, have made the most outstanding artistic contributions to the dramatic work of the University.

Edward Monroe Stone Cup.—This handsome cup, presented in 1929 by Edward Monroe Stone, '92, is awarded annually to any fraternity or sorority for superior ability in intra-mural forensics. The debates are conducted by the local chapter of Tau Kappa Alpha, whose plans and methods relative to the awarding of the cup are subject to the approval of the instructor in charge of forensics. The cup will become the permanent possession of any fraternity or sorority winning it three times in succession.

Psi Lambda Cup.—Psi Lambda, the home economics club, each year awards a cup to the Home Economics senior who has shown the greatest improvement in personality and scholarship during her four years in college.

Alpha Chi Omega Prize.—A ten dollar prize will be awarded annually by Alpha Tau Chapter of Alpha Chi Omega to the undergraduate student of the University who submits to the head of the department of English the best informal essay of less than three thousand words. The title may be chosen by the student. All essays must be written specifically for the Alpha Chi Omega Prize. Such essays will be due May 27 of each year. After the prize has been awarded, all essays will be returned upon request.

Delta Chi Trophy.—Delta Chi, honorary mathematics society, will present, at the end of each academic year, a silver cup to that member of the sophomore class, eligible for membership in the society, who during two years' courses in mathematics has demonstrated valuable mathematical ability, by ranking as one of the five high students in mathematics. General scholastic standing and personality shall also figure in determining the award. A committee consisting of the Dean of the College of Technology, the Dean of the College of Liberal Arts, the head of the Department of Mathematics, the president of Delta Chi, and one other student member of the society shall determine the winner in each year.

Association of Women Students Award.—The Association of Women Students will award annually twenty-five dollars to the woman student who has proved to be of value to the women's student body, and who has shown by scholarship, self-help, leadership, and loyalty that she is worthy of this award.

Alpha Zeta Scholarship Cup.—A cup is awarded annually by the Granite Chapter of the Fraternity of Alpha Zeta to the sophomore in the College of Agriculture who has made the highest scholastic average during his first three semesters' work. The winner is to have his name engraved on the cup and to hold it for one year.

General Chemistry Award.—The local chapter of Alpha Chi Sigma, professional chemistry society, engraves each year on a trophy placed in Charles James Hall, the name of the freshman who secures the highest average grade in chemistry.

Phi Lambda Phi Award.—Phi Lambda Phi, physics honor society, will award annually a prize of ten dollars to a senior member of the society who is most deserving, as revealed by proficiency in physics and general scholarship.

STUDENT ACTIVITIES

Student Government

Student Council.—The Student Council exists to serve the undergraduate body as (a) a coördinating body between the University Administration and the student body, and to make recommendations to the Administration; (b) in coöperating with the student body, secur-

ing and assuring the highest interests of morale on the campus; (c) in creating a group of student leaders to initiate, supervise, and administer student affairs of common concern. Members of the Council are elected by ballot each spring. The President of the Association of Women Students meets with the Student Council during consideration of matters pertaining to the whole University.

Association of Women Students.—The purposes of this Association, as stated in the Constitution of the organization, are as follows: (a) to promote a sense of individual and collective responsibility among the women students in maintaining the highest standards of university life; (b) to promote the highest standards of honor and integrity in all matters of personal conduct; (c) to enact and enforce laws in all matters operating for the welfare of the women students and which do not fall under the immediate jurisdiction of the University Administration; (d) to encourage active coöperation in the work of self-government among the women of the University.

Casque and Casket.—A society which is composed of students of the upper classes, having an equal number of representatives from each fraternity. Its duty is to regulate the campus interfraternity relations. It is particularly charged with drawing rules governing the fraternity rushing period.

Pan Hellenic.—An organization designed to transact all business of common interest to the women's fraternities, including the regulation of the rushing period.

Religious Activities

Christian Work.—Christian community service is encouraged by various activities.

The Advisory Board for Christian Work employs an inter-church student's pastor and a women's secretary. They coöperate with the Y.M.C.A. and Y.W.C.A. in the promotion of their work, as well as in carrying definite responsibility for the pastoral work among the students. General contributions are received yearly from the Baptist, Congregational, Methodist Episcopal, Episcopal, and Presbyterian organizations and the State Committee of the Y.M.C.A. Everything possible is done in a social and pastoral way for the students of all religious denominations, whether Protestant, Catholic or Hebrew.

Students receive a cordial welcome at the services of the Community Church (Congregational). Roman Catholic services are held every Sunday morning in the auditorium in Murkland Hall, and all students of that faith are urged to participate. Christian Work conducts Sunday evening meetings, frequently with outside speakers, and other voluntary religious meetings, including occasional special assemblies with addresses of an inspirational charatcer.

Menorah Society.—A local chapter of the Intercollegiate Menorah Association for the study and advancement of Jewish culture and ideals. Organized in 1928.

National Honor and Professional Societies

Phi Kappa Phi.—A national honorary fraternity founded at the University of Maine in 1897 for the purpose of promoting the highest grade of scholarship. A chapter was established at the University in 1922. Its membership is taken from the highest ranking members of the Senior class. New members are elected at the beginning of the first and second semesters.

Alpha Zeta.—A national professional honor fraternity of agricultural students, organized at the University in 1903. Membership is honorary and is restricted to students obtaining high class standing or to graduates who have shown marked ability in agricultural study and research.

Phi Sigma.—A national honor society for students doing major work in biology who have completed a certain number of courses with honor grades. Established in 1915.

Tau Kappa Alpha.—A national honor society which takes its membership from students who have been outstanding in debate and oratory. Established on the New Hampshire campus in 1925.

Kappa Delta Pi.—A chapter of the national educational society, organized from a local group formed on this campus in 1926.

Alpha Chi Sigma.—A professional fraternity with chapters in various colleges and universities. Members are elected from high ranking students whose major work is in the Department of Chemistry. Established on this campus in 1911.

Scabbard and Blade.—A national honorary military fraternity. The New Hampshire Company (Company F, Sixth Regiment) was organized in 1926.

Branch of the American Institute of Electrical Engineers.—A student organization conducted in accordance with the By-Laws of the Institute, whose meetings are given a place on the student's class schedule. The purpose of the organization is to promote interest in electrical engineering, to foster acquaintance and good fellowship among the faculty and students in the Department of Electrical Engineering.

Branch of the American Society of Mechanical Engineers.—An organization of upperclass men in mechanical engineering. Holds regular class meetings for the presentation and discussion of engineering papers by members and by visiting engineers.

Branch of the American Society of Civil Engineers.—An organization of upperclass students in civil engineering. Regular class meetings are held for the purpose of investigating by reading and discussion various engineering topics of the day.

Student Publications

"The New Hampshire."—A semi-weekly newspaper presenting undergraduate and alumni news, published by an editorial board composed of students.

"The Granite."—An illustrated annual published by the Junior class.

"The New Hampshire Student Writer."—An annual collection of outstanding student compositions in prose and poetry. This publication is supervised by the Department of English.

Departmental Clubs

Folio.—A society composed of students interested in creative writing, particularly the short story and essay.

Erato.—A society composed of students interested in the study and writing of poetry.

Phi Lambda Phi.—An honor society whose members are students of high standing in Physics.

Le Cercle Français.—This society was established in the spring of 1919 to offer competent students an opportunity to acquire a speaking knowledge of the French language and to stimulate an interest in the intellectual life of France.

Alpha Sigma.—An organization established in 1925, whose membership is taken from high ranking students in Architecture.

Delta Chi.—A society founded in 1925, whose membership is taken from high ranking students in Mathematics.

Psi Lambda.—A society composed of high ranking students in Home Economics. Established in 1926.

"N. H." Club.—Membership in this organization is open to all men who have earned varsity athletic letters.

Classical Club.—This society, established in 1927, takes its members from students interested in Latin and Greek.

The University 4-H Club.—This organization is composed of students who have been engaged in boys' and girls' club extension work.

Gamma Kappa.—An organization, established in 1933, whose membership is taken from high ranking students in Geology.

Dramatic and Musical Organizations

Mask and Dagger.—This is a dramatic club which aims to make a practical study of the drama and to present each year three plays on the stage of the "little theater" in Murkland Hall. Membership in this society includes students who have participated in plays or who have assisted in stage production.

University Band.—This is a military and concert organization whose membership is taken from members of the University Regiment and selected students. Academic credit is given for successful completion of each semester's work. The band plays at various University functions and games.

Glee Club.—The Glee Club is divided into two organizations, one for men and one for women. Membership in the club is open to all undergraduates interested in choral singing who fulfill the requirements of a try-out. The club presents programs of choral singing several times each year.

Associated Student Organizations.—An organization composed of all extra-curricular activities, societies or groups for the purpose of securing a satisfactory administration of activity funds. Activities receiving funds from the student activity tax are members of this organization. A committee of six appointed by the President of the University advises with organizations relative to the budgeting and expenditure of monies resulting from the collection of the student activity tax, approves the budgets presented, and makes recommendations to the President of the University relative to the general administration of the tax. This committee includes undergraduates and Faculty members.

Athletic Association.—The Athletic Association, composed of the entire student body, was organized in 1897, for the conduct, in coöperation with the Administration and Faculty, of a wholesome program of intercollegiate sports. Every undergraduate automatically becomes a member of the Association at the time of registration. A ticket is issued to each student at that time which admits him to all home varsity athletic games.

Outing Club.—This organization, established in 1915, chiefly interested in life outdoors, maintains three cabins, encourages winter sports, hiking and other forms of outdoor recreation. Membership is open to all students.

Social Fraternities and Sororities.—The following fraternities and sororities have chapters on the New Hampshire campus. The dates listed indicate (1) date of founding as local fraternity (in parentheses) and (2) date of granting of national charter.

Fraternities.—Kappa Sigma, (1894) 1901; Sigma Alpha Epsilon, (1894) 1917; Theta Chi, (1903) 1910; Lambda Chi Alpha, (1906) 1918; Alpha Tau Omega, (1907) 1917; Phi Mu Delta, (1914) 1918; Pi Kappa Alpha, (1921) 1929; Sigma Beta, 1921; Phi Alpha, (1922) 1924; Theta Kappa Phi, (1922) 1923; Alpha Gamma Rho, 1924; Phi Delta Upsilon, 1924; Tau Kappa Epsilon, (1926) 1932.

Sororities.—Chi Omega, (1897) 1915; Alpha Chi Omega, (1913) 1924; Alpha Xi Delta, (1913) 1914; Phi Mu, (1916) 1919; Kappa Delta, (1919) 1929; Theta Upsilon, (1926) 1930; Pi Lambda Sigma, 1929.

METHODS OF ADMISSION

Provided the special requirements of the separate colleges are fully met, the University will admit without examination properly prepared New Hampshire students who are graduates of high schools or academies of New Hampshire that are approved by the State Board of Education, or those who are graduates of other specially approved schools.

Applicants whose records do not give evidence of capacity, disposition, and preparation adequate for successful college study may be required to withdraw their applications or to submit to examinations to determine their fitness for college study. This applies directly to those who stand in the lowest quarter of their respective classes in the secondary school, and to others concerning whose qualifications there may be doubt. In so far as is practicable, officers of the University will arrange for personal conferences with such applicants.

The number of persons, not residents of New Hampshire, admitted each year is determined by vote of the Trustees and the following State law:

"The number of new students entering the University of New Hampshire from the states of Maine, Massachusetts, and Vermont shall not exceed eight per cent of the total enrollment of the entering class of the four-year course of the preceding University year; and the enrollment of new students, exclusive of those from the states of New Hampshire, Maine, Massachusetts, and Vermont, shall not exceed four per cent of the total enrollment of the entering class of the four-year course of the preceding year." This law is waived by act of the Legislature until June 30, 1937. For the present, the number of out-of-state students permitted entrance is limited by the available dormitory and instructional facilities.

Each applicant for admission to the University will be required to submit two application forms: (1) an "admission credential" blank filled out by the headmaster or principal of the secondary school from which he is graduated; (2) a "personal statement" blank filled out by the applicant. These blanks are distributed through New Hampshire and other secondary school officials or they may be secured by applica-

tion to the Dean of the Faculty, at Durham, to whom all such blanks should be forwarded.

In order to give ample time for the selection of out-of-state students, and for full investigation of New Hampshire applicants of doubtful preparation, it is desirable that applicants for admission, both from within and without the state, forward their personal statements and credentials during the month of April, it being understood that the preparatory school work will be completed in June. Credentials should cover work done as nearly as possible to date of application.

Candidates for admission to the freshman class must show evidence, either by credential or examination, that they are prepared in 15 units as indicated in the following table. At least 12 of these units should be from Groups A, B, C, D, and E.

An entrance unit represents one study of four or five recitations a week for one year. It is assumed that two hours of manual training or laboratory work are equivalent to one hour of classroom work.

	Required Units	*College of Agriculture*	*College of Liberal Arts*	*College of Technology*
Group A	English	3	3	3
*Group B**	Mathematics	2	2	3†
Group C	Social Science and History	1	1	1
Group D	Natural Science	1	1	1
Group E	Foreign languages			
Group F	Vocational Subjects			
		7	7	8
	Elective Units	8	8	7
	Total for admission.....	15	15	15

Elective units may be offered from all groups, including a fourth year of English.

* At least two years of mathematics consisting of one year of algebra and one year of plane geometry are required for entrance except that a candidate for admission to the General Curriculum of the College of Liberal Arts who offers two units in a single foreign language may substitute for the two units required in mathematics two additional units in subjects named in groups A, C, D and E above.

† Students entering the College of Technology must offer three units of mathematics which should include elementary and advanced algebra, plane and solid geometry.

Entrance examinations will be given at the University September 1 and 2. Requests for these examinations should be forwarded to the Dean of the Faculty at least one week in advance.

Cases not covered by the above statements will be decided by the Entrance Committee of the Faculty.

Candidates for advanced standing may be admitted on the basis of the work completed at the institution from which they come.

Every candidate for admission to the University shall be required to procure a statement, signed by the town or city clerk, to the effect that the father or legal guardian is a resident of the town or city and state from which he purports to register. Students admitted from foreign countries or states other than New Hampshire shall be deemed to be non-resident students throughout the entire University course unless and until the parents or out-of-state legal guardian shall have gained residence in New Hampshire.

Admission of non-resident candidates will be by selection, and only records of good grade will be considered; character, leadership, alertness, etc., will also be taken into account. Because of the large number of New Hampshire students needing financial assistance in the form of employment, only a very limited number of applications can be considered which do not give evidence of reasonable financial backing.

FRESHMAN WEEK

Freshman Week was instituted at the University of New Hampshire in 1924. It is evident from a study of the results of the activities of this week that it has served as a valuable means of adjusting freshmen to their new environment, of creating right attitudes towards college work and of minimizing the usual delays during the first few weeks of the regular term. By means of so-called "placement tests" the students will be sectioned according to their abilities and aptitudes. The week also affords an opportunity for the students to learn to know each other, to organize their efforts, to work together, to play together, and to become acquainted with the campus, the buildings, the Faculty and with the courses of study and the traditions of the University.

Attendance of all freshmen throughout Freshman Week, beginning Tuesday, September 14, and continuing through Saturday, September 18, will be obligatory. Any prospective candidate for the freshman class who is absent from the exercises beginning on September 14 will seriously imperil his admission to the University.

REQUIREMENTS IN DETAIL

GROUP A. ENGLISH

The requirement in English is that recommended by the National Conference on Uniform Entrance Requirements in English:*

"1. Habits of correct, clear, and truthful expression. This part of the requirement calls for a carefully graded course in oral and written composition, and for instruction in the practical essentials of grammar, a study which should be reviewed in the secondary school. In all written work constant attention should be paid to spelling, punctuation, and good usage in general as distinguished from current errors. In all oral work there should be constant insistence upon the elimination of such elementary errors as personal speech-defects, foreign accent, and obscure enunciation."

"2. Ability to read with intelligence and appreciation works of moderate difficulty; familiarity with a few masterpieces. This part of the requirement calls for a carefully graded course in literature."

Lists of books should be provided from which a specified number of units must be chosen for reading and study. These lists should be progressively difficult, ranging from the simpler books suitable to the earlier years in the secondary schools to those requiring the closer study warranted in the later years. Such lists should include the following:

At least one novel each by Scott, Eliot, Dickens, Hardy, Stevenson, Hawthorne, Cooper and Mark Twain; *The Merchant of Venice, As You Like It, Hamlet* or *Macbeth, Midsummer Night's Dream*; Milton's *Minor Poems*; Irving's *Sketch Book*; Coleridge's *Ancient Mariner*; Palgrave's *Golden Treasury*; speeches by Washington and Lincoln. It is also highly *desirable* that the prospective college student should have read the following: some of the great epics in translation; collections of modern verse, of scientific writings, and of modern plays; some biography; and *Myths and Their Meaning,* by Herzberg.

GROUP B. MATHEMATICS

1. Elementary Algebra.—The four fundamental operations for rational algebraic expressions. Factoring. Fractions, including com-

* Reprinted from Document 123 of the College Entrance Examination Board.
† For more detailed information concerning the reading, write to Head, Department of English, University of New Hampshire, Durham, New Hampshire.

plex fractions, and ratio and proportion. Linear and quadratic equations, both numerical and literal. Problems depending on linear and quadratic equations. Radicals, including the extraction of the square root of polynomials and of numbers. Exponents, including the fractional and negative.

2. Advanced Algebra.—The formula for the *n*th term and the sum of the terms of arithmetical and geometrical progressions, with applications. The theory and use of logarithms, without involving the use of infinite series. The binomial theorem for positive integral exponents. Complex numbers, with graphical representation of sums and differences. Determinants limited to simple cases. The elements of the theory of equations.

3. Plane Geometry.—The usual theorems and constructions of good text-books, including the general properties of plane rectilineal figures; the circle and measurement of angles; similar polygons; areas; regular polygons, and the measurement of the circle. The solution of numerous original exercises, including loci problems. Applications to the measurement of lines and plane surfaces.

4. Solid Geometry.—The usual theorems and constructions of good text-books, including the relations of lines and planes in space; the properties and measurement of prisms, pyramids, cylinders and cones; the sphere and the spherical triangle. The solution of numerous original exercises, including loci problems. Applications to the measurement of surfaces and solids.

5. Plane Trigonometry.—The subject-matter of plane trigonometry as presented in good text-books, including the solution and use of trigonometric equations of a simple character, the use of logarithms. the solution of right and oblique triangles, and practical applications.

6. Review Mathematics.—A general mathematics review during half of senior year is recommended, especially for students preparing for college engineering courses. A certificate covering the work of not more than one unit will be accepted for entrance.

GROUP C. SOCIAL SCIENCE AND HISTORY

This group includes History, Economics, and Commercial Law.

Although there are excellent text-books in history, an adequate preparation cannot be obtained by these alone. Some collateral work

is necessary, whatever book is used, and with certain ones a large amount is necessary. The details of the preparatory work in the social sciences are stated in "The Program of Studies Recommended for the Public Schools of New Hampshire," by the State Board of Education.

1. History of Civilization.

2. Ancient History.—This may include the earliest nations and the period to 800 A.D., or it may be limited to Grecian History and Roman History to the fall of the Western Roman Empire.

3. Mediaeval and Modern History.

4. English History.

5. American History and Civics.—It is assumed that a reasonable amount of time is to be given to the study of the Constitution of the United States.

6. Economics.—The work in this field should consist of the mastery of a standard text or its equivalent assignments from one or more standard works. The study should introduce the student to the broad field of historical and descriptive Economics. This should include:

1. Elementary economic geography.
2. The leading facts in the economic history of the United States.
3. Human wants and their satisfaction.
4. A description of money and a brief study of its function.
5. Distribution, including some study of land, labor, capital.
6. Governmental relation and control of business.

For a more complete description see the "Program of Studies" recommended by the State Board of Education of New Hampshire.

7. Commercial Law.—The work in Commercial Law should include a study of the elementary principles of the law of contracts, agency, sales, bailments, negotiable instruments, business organizations, personal and real property. (For a detailed statement, see "Program of Studies Recommended for the Public Schools of New Hampshire" by the State Board of Education.)

GROUP D. NATURAL SCIENCE

A notebook, carefully kept, and examined by the teacher, is an essential part of all laboratory work in science.

1. Botany.—The work in botany should consist of (1) the study of a standard text; (2) four or five exercises a week, at least one of which should be laboratory work. Either a half or the whole of a year's work will be accepted.

2. Chemistry.—Elementary inorganic chemistry should cover (1) a study of the more common non-metallic and metallic elements and their most important compounds; (2) an introduction to the general theoretical principles; (3) calculations based upon chemical equations and changes of gaseous volumes. A year's work should consist of four or five exercises per week, at least one of which should be in laboratory work.

3. Physics.—The work in physics should consist of (1) the study of a standard text for one school year under the guidance of a science teacher. The minimum time devoted to this phase of the work should be four periods a week. (2) Performance of such experiments as the science teacher suggests, under the personal guidance of the teacher. The minimum time for this phase of the work, to include both performance of experiment and writing of report, should be two periods per week.

4. Zoölogy.—A study of the fundamental principles of animal structure and the dissection of type forms. The student should become familiar with the characteristics of the various phyla of the animal kingdom. The study should consist of four or five exercises a week, at least one of which should be laboratory work. Either a half or the whole of a year's work will be accepted.

5. General Science.—To meet a recent movement in the disposition of the science work in the high schools, a course in general science which amounts to at least four exercises a week for one year will be accepted. Such a course may include something of the biologic and earth sciences, the sciences employed in household economy, and the more common phenomena of physics and chemistry.

GROUP E. FOREIGN LANGUAGES

1. French.—Work of the first year should include (1) careful drill in pronunciation, through dictation, conversation, and reading aloud; (2) drill upon the rudiments of grammar, with some translation of

simple English into idiomatic French; (3) reading of 200 pages of French prose, if French is not the language of the classroom and a large amount of oral French is not used by teacher and pupils, or of 100 pages if French is the language of the classroom and the time saved by a reduced reading standard is devoted to oral work in French; in both cases the reading should be divided between some intensive, accurate study of the French prose, with translation into English to check up on the pupils' understanding of the passage, and some extensive reading to induce pupils to read French for the pleasure and satisfaction it affords.

Work of the second year should include (1) the reading of 300 or 400 pages of French prose, the amount to depend, as in the first year, upon the time devoted to oral work, the reading being again divided into intensive and extensive; (2) dictation, conversation, grammar drill, and composition, based on topics connected with the classroom and events of everyday life in France; (3) some practice in translating into French from English variations or paraphrases of the French texts read, so as to fix important words and idioms in the memory and to transpose the passive knowledge gained from reading into an active command of French.

Work of the third year should include (1) the reading of 500 or 600 pages of French, part intensively, part extensively, with emphasis on books of recognized literary value and on those which describe the history and civilization of France; (2) continued oral drill (dictation, discussions, etc.); (3) emphasis upon the writing of grammatically correct and idiomatic French dealing partly with the texts read, partly with the ordinary experiences of life here and in France.

2. GERMAN.—Work of the first year should include (1) careful drill in pronunciation; (2) drill upon the rudiments of grammar; (3) dictation and other oral work; (4) the reading of from 100 to 200 pages of prose; (5) translation of simple English into correct, idiomatic German. Work of the second year should include (1) the reading of from 200 to 300 pages of prose, part intensively to make the pupils acquire habits of accuracy, part extensively to encourage them to read for pleasure and satisfaction; (2) oral drill (dictation, discussions, reading aloud); (3) continued drill upon the rudiments of grammar, through exercises based upon the texts read and others dealing with life in Germany; (4) the study of German history, customs, and insti-

tutions through appropriate reading texts and composition exercises; (5) reading and memorizing of simple German lyrics.

3. Latin, Elementary.—Grammar and the equivalent of four books of Caesar. Two years' work.

4. Latin, Advanced.—Equivalent of Virgil, six books, and Cicero, six orations.

GROUP F. VOCATIONAL SUBJECTS

1. Agriculture (Smith-Hughes).—The work in agriculture covers ten periods a week throughout the school year and includes a study of and participation in the following, supplemented by at least six months of supervised, individual project work on the home farm:

a. Major, contributory and minor agricultural enterprises in the community based upon the results of a survey of local farm practice.

b. At least twenty per cent of the total time allotted each year is devoted to farm mechanics, comprising the daily jobs confronting the farmer in keeping his equipment in the best of condition and in doing the ordinary repair and construction work which arises on the farm.

c. Agricultural economics and farm management are considered each year in relation to each of the three types of enterprises. In addition, part of the work of the senior year is devoted to a synthesis and extension of the principles applied in connection with the three types of enterprise in each of the three preceding years.

Centering around the farm job and the home project, the activities of the pupils include discussions, surveys, directed study, demonstrations, field trips and manual work.

2. Commercial Subjects.—Junior business training, commercial arithmetic, bookkeeping, commercial geography and history, stenography and typewriting, office or secretarial practice.

3. Domestic Arts.—Textiles and clothing, foods and nutrition, the home, its care and management, the family and its members, and child development.

4. Mechanic Arts.—Cabinet making and wood turning, pattern making and molding, tool forging and work on lathe, shaper, planer, drill press and milling machine, electrical work, automobile mechanics and repair, printing, related mechanical drawing, shop mathematics, shop physics, mechanics, shop organization.

SPECIAL COURSES

A mature student who is not a candidate for a degree may be admitted as a special student for one year upon the approval of the entrance committee and the dean of the college in which he desires to work. In addition, each application for a course must have the approval of the head of the department whose work the applicant desires to take. No credit earned by a special student shall count toward a degree except upon recommendation of the entrance committee and the vote of the appropriate college faculty.

ADMISSION BY TRANSFER

A candidate for admission to advanced standing from an institution of collegiate rank may receive credit without examination for work completed at such institution subject to the following requirements:

(1) He must present a catalog of the institution from which he comes together with an official certificate showing (a) all preparatory subjects accepted for entrance, (b) a complete transcript of his record including grade of scholarship in each subject, (c) a statement of honorable dismissal.

(2) All candidates for the bachelor's degree, admitted to advanced standing, must spend their last year in residence, either in course or in summer school. This requires the completion of at least 32 semester credits.

(3) Regardless of the amount of advanced standing a student may secure, in no case will he be given a bachelor's degree until he has satisfied the full requirements of the curriculum he may elect.

THE GRADUATE SCHOOL

AIMS

The Graduate School aims to meet the needs of superior students who are preparing to become teachers in colleges or universities, or investigators, and to offer opportunities to qualified students for a more advanced training than they can obtain in an undergraduate curriculum.

ADMINISTRATION

Graduate work is offered, under the supervision of the Dean of the Graduate School, by competent members of various departments of instruction and research. These members constitute the Faculty of the Graduate School.

The general administrative functions of the Faculty are delegated to the Dean and the Council.

ADMISSION

A student who holds a bachelor's degree, or its equivalent, from an approved college or university, is eligible for admission to graduate study.

Admission to graduate study does not necessarily imply admission to candidacy for an advanced degree. Students who are not planning to become candidates for an advanced degree may be admitted to graduate study upon the recommendation of the heads of the departments concerned, and with the approval of the Dean.

A student may major only in the departments represented in the catalog of the Graduate School.

REGISTRATION

A student desiring to register for graduate study must submit to the Dean of the Graduate School the official application for admission to graduate study. Blanks for this purpose may be obtained from the Dean of the Graduate School.

Upon admission to graduate work, a student first pays his fee at the Business Office and deposits his enrollment cards with the Registrar.

REQUIREMENTS FOR GRADUATE CREDIT

Graduate credit will not be allowed to undergraduate students unless such credit has been approved in advance by the Dean of the Graduate School.

A student will not receive graduate credit for a course in which he has obtained a grade lower than 70.

ADVANCED DEGREES

The advanced degrees conferred are: Master of Science, Master of Arts, Master of Education, Master of Civil Engineering, Master of Electrical Engineering and Master of Mechanical Engineering.

Requirements for the Master's Degree

Residence.—A minimum of one full academic year, or four summer sessions, in residence, is required.

Credits.—An average grade of at least 80 in not less than 30 semester credits is required, of which not less than 17 or more than 20 semester credits shall be devoted to the major course (including the thesis), and not less than 6 or more than 10 semester credits to the minor courses. Work in allied departments may be properly correlated with the major course. Of the total credits required for an advanced degree, not more than half may be transferred from another institution.

Thesis.—If a thesis is required, the candidate must file with the Council, for their approval, a statement of the thesis subject as recommended by the head of the department in which the thesis work has been done, at least six months previous to the time the degree is sought.

All theses must be typewritten upon standard paper, eight and one-half by eleven inches, medium weight, neatly bound in black cloth, and gilt-lettered on the first cover with the title, name of author, degree sought, and year of graduation. The title page should bear the following statement:

"A thesis submitted to the University of New Hampshire in partial fulfillment of the requirements for the degree of

Master of Arts in (name of "major" subject)
Master of Science in (name of "major" subject)

Master of Education
Master of Civil Engineering
Master of Electrical Engineering
Master of Mechanical Engineering."

Whenever a thesis is printed in any periodical, it must be designated as having been accepted as a Master's thesis by the University of New Hampshire.

Two bound copies must be filed before Commencement Day, one with the Librarian and one with the head of the department in which the major work has been done.

EXAMINATIONS.—All candidates must meet the regular departmental requirements as to examinations in the courses for which they are registered, and the requirement of a special comprehensive examination, by the heads of the departments in which the major and minor courses have been taken, three months previous to the time the degree is sought. In addition, the candidate must pass an oral examination by a special committee designated by the Council and including the heads of the departments in which the major and minor courses have been taken, before the candidate may be recommended for the Master's degree. At least two months previous to the time the degree is sought the candidate must file with the Dean of the Graduate School the "Application for Examination for Advanced Degree." The application forms may be obtained at the office of the Dean of the Graduate School.

For detailed information concerning graduate study, see the Catalog of the Graduate School.

PROFESSIONAL DEGREES IN ENGINEERING

Mechanical, Electrical, and Civil Engineering graduates of the University of New Hampshire are eligible to register as candidates for professional degrees in these three branches of engineering.

These degrees will be granted, after the preparation of acceptable theses, to those having not less than four years' professional experience subsequent to the bachelor's degree, in which the applicants have wholly or in part supervised, directed or designed engineering work;

or have been in responsible charge of instruction or research in engineering. The acceptability of the theses and professional experience is determined by an examining committee.

Procedure.—The procedure for candidates for professional engineering degrees is as follows:

(1) Prepare an outline for a thesis after consultation with the head of the department concerned. This consultation may be by letter.

(2) When the thesis subject is accepted by the head of the department in which the degree is to be taken, the candidate will be registered in the Registrar's Office. This registration must be completed by October 1st of the academic year in which the degree is to be conferred.

(3) The first draft of the thesis must be submitted to the professor in charge not later than March 1st, and the completed thesis in its final form by May 1st.

(4) Pass an examination at the University covering the candidate's professional practice and the engineering principles underlying the thesis.

(5) Pay the diploma fee of $5.00 at the Business Office not later than 12 noon of the Saturday next preceding the date when the degree is conferred.

Thesis.—The thesis must be typewritten upon standard paper, eight and one-half by eleven inches, medium weight, neatly bound in black cloth, and gilt-lettered on the first cover with title, name of author, degree sought, and year of graduation. The title page should bear the following statement:

"A thesis submitted to the University of New Hampshire in partial fulfillment of the requirements for the professional degree of Mechanical Engineer (Electrical Engineer, Civil Engineer)."

Whenever a thesis is printed in any periodical, it must be designated as having been accepted as a Professional Engineering thesis by the University of New Hampshire.

Two bound copies must be filed before Commencement Day, one with the Librarian and one with the head of the department in which the major work is done.

UNDERGRADUATE DEGREES

The University confers two undergraduate degrees: Bachelor of Science and Bachelor of Arts.

Agriculture and Technology: The degree of Bachelor of Science is conferred upon students graduating from the College of Agriculture and from the College of Technology.

Liberal Arts: The degree of Bachelor of Science is conferred upon students graduating from the College of Liberal Arts who have elected a prescribed curriculum in General Business, Home Economics, Pre-Medical, Education-Teacher Training, Social Service, Secretarial, or who have majored in the General Arts Curriculum in any of the following departments: Architecture, Botany, Chemistry, Economics and Accounting, Education, Entomology, Geology, Home Economics, Mathematics, Physical Education for Women, Physics, Sociology, Zoölogy.

The degree of Bachelor of Arts is conferred upon students graduating from the College of Liberal Arts who have majored in the General Arts Curriculum in any of the following: Art in the department of Architecture, English, French, German, Latin, Spanish, History, Music, Philosophy, Psychology, Political Science.

COLLEGE OF AGRICULTURE REQUIREMENTS

Each candidate for a degree must complete 144 semester credits and the courses prescribed in one of the major four-year curricula.

Students graduating from the four-year curriculum in Animal Husbandry, Dairy Husbandry, Teacher Training or General Agriculture must present to the Dean of the College of Agriculture, at least two weeks prior to Commencement, satisfactory evidence of having had practical experience in farm work, either through having lived on a farm for at least two years subsequent to the age of 12, or through having worked on a farm at least six months subsequent to the age of 16.

Students graduating from the Forestry Curriculum must have spent at least three months in practical forest work, in addition to attendance at an eight weeks' summer camp under supervision of the forestry department.

Students graduating from the Horticulture Curriculum or the Poultry Curriculum must have had practical experience on the College Farm and elsewhere to satisfy the heads of the major departments concerned.

Teacher Training Seniors must take one semester of supervised teaching in some high school in the state designated by the State Department of Education.

COLLEGE OF LIBERAL ARTS REQUIREMENTS

Each candidate for a degree in the College of Liberal Arts must complete 128 semester credits of which 64 must be with a grade of 70 or better, and in addition must fulfill each of the following requirements, or the requirements of one of the prescribed curricula offered by the College of Liberal Arts.

1. General Liberal Arts Curriculum

A. General University Requirements.

Convocation	Freshman, Sophomore and Junior years
Freshman Assembly	Freshman year—First Semester
Physical Education for Men	Freshman and Sophomore years
Physical Education for Women	Freshman, Sophomore and Junior years
Military Science	Freshman and Sophomore years

B. Special Freshman Requirements.

The completion of the following special Freshman courses:

*English 1 and 2

*Introduction to Contemporary Civilization, History 1 and 2

*A biological science (Botany 1, 2 or Zoölogy 1, 2), or a physical science (Chemistry 1, 2; Geology 1, 2; or Physics 1, 2).

C. Special Language and English Requirements.

All students are required to pass a reading test in French, German, Latin, or Spanish before graduation. This test will be based on two years of secondary school language training or the equivalent. Also 12 semester hours of English,* including Freshman English, are required for graduation.

D. Sophomore Group Requirements.

Students are required to complete one year, elected from each of the following three groups of courses. Not less than one year's work

* Not counted toward the fulfillment of major or group requirements.

in any given course shall count toward the fulfillment of this requirement.

Group I.

(*a*) Mathematics

(*b*) History

(*c*) English, French, German, Greek, Latin, Spanish

Group II.

A biological science (Botany 1, 2 or Zoölogy 1, 2), or a physical science (Chemistry 1, 2; Geology 1, 2, or Physics 1, 2). Students electing a biological science during their freshman year must elect a physical science during their sophomore year, or *vice versa.*

Group III.

Economics, Education, Political Science, Psychology, Philosophy, Sociology.

E. Major Requirements.

Each student pursuing the General Liberal Arts Curriculum in the College of Liberal Arts shall select at the beginning of the sophomore year a major department in which he must pass courses to a total of 24 semester credits with a grade of 75 or better. Courses ordinarily open to freshmen or taken in the freshman year may not be counted toward the fulfillment of the major requirements. Courses in other departments closely related to the major courses may be counted with the consent of the head of the major department.

The following major departments are open to students in the College of Liberal Arts. Students majoring in departments not in the College of Liberal Arts must have their schedules approved by the Dean of the College of Liberal Arts.

Art and Architecture
Botany
Chemistry
Economics and Accounting
Education
English
Entomology
Geology
History
Home Economics
Languages
Mathematics
Music
Philosophy and Psychology
Phys. Ed. for Women
Physics
Political Science
Sociology
Zoölogy

2. Prescribed Curricula (College of Liberal Arts)

The following prescribed curricula lead to the degree of Bachelor of Science: General Business; Education-Teacher Training; Home Economics, Teacher Training, Institutional Management, Extension Training; Social Service; Secretarial.

Students may elect a prescribed curriculum only with the consent of the head of the department in which the curriculum is offered. They must also satisfy the special freshman and the special language and English requirements, (see B and C under General Liberal Arts Curriculum) and must pass at least 24 semester credits of the required courses in the prescribed curriculum with a grade of 75 or better.

COLLEGE OF TECHNOLOGY REQUIREMENTS

Each candidate for a degree must complete 144 semester credits and the courses required in one of the four-year curricula.

FOUR-YEAR CURRICULA

COLLEGE OF AGRICULTURE

M. Gale Eastman, *Dean*

DEPARTMENTS

Agricultural and Biological Chemistry
Agricultural Economics
Agronomy and Agricultural Engineering
Animal Husbandry
Botany and Bacteriology
Dairy Husbandry
Entomology
Forestry
Horticulture
Poultry Husbandry

The object of the four-year curricula of this College is to give a broad general education and thorough training in the basic sciences as well as to develop specific technical knowledge relating to the various phases of agriculture. To this end several subjects in the Colleges of Liberal Arts and Technology have been added to those provided by the faculty in Agriculture. The lecture and recitation work of the classroom in agriculture is amply supplemented in all cases by practical exercises in the laboratories and about the farm. Seminars and discussion courses also are provided for seniors or other advanced students.

Many of the graduates of the four-year curriculum return to the farm for the purpose of putting into practice the knowledge and training gained in their college courses, and many of them have become successful and prosperous citizens of their communities; others, who have no farms of their own, accept salaried positions as superintendents or foremen on large dairy, fruit, stock or poultry farms; still others take positions as teachers of science and agriculture in our secondary schools, or as assistants in our agricultural colleges, experiment stations or extension services; and, finally, an increasingly large number continue in specialized work, here or elsewhere, toward graduate degrees.

The major curricula from which the agricultural student may make his selections are as follows:

1. General Agriculture
2. Agricultural and Biological Chemistry
3. Animal Husbandry
4. Botany and Bacteriology
5. Dairy Husbandry
6. Entomology
7. Forestry
8. Horticulture
9. Poultry Husbandry
10. Teacher Training

During the freshman and sophomore years, all agricultural students pursue the same general curriculum of fundamental work. During this period, a very few choices or alternative courses are indicated. The purpose of such a scheme is to make possible a deferred decision by the student who is uncertain of his interests, and therefore cannot decide at once on a curriculum. *However, there are definite advantages that accrue from making a proper selection of courses even in the freshman year,* and students are urged to consider their aptitudes, discuss their problems with advisers, and heads of departments, and reach decisions as to their curriculum preferences during Freshman Week.

In other words, these introductory courses are not electives in the usually accepted sense, to be taken or not at the discretion of the student, but rather they make possible the rounding-out of the fundamental work in the interests of perfecting the major curriculum to be finally completed. The highly technical or semi-professional curricula, such as Agricultural and Biological Chemistry, Entomology, Forestry, and Teacher Training, involve sequences of subject-matter for the whole four years, and so much of it that certain courses even in the freshman year must be carefully selected and prescribed. Other curricula may be a little less exacting, but there will always be a decided advantage to the student in making an early and accurate selection of his major work.

The earlier a student can decide on his curriculum, the surer will the prescribed work for a degree be completed in the allotted time, and the more easily will he find opportunities for choosing electives to suit his personal desires.

The general descriptions of curricula which follow should be carefully studied.

General Agriculture.—This curriculum is offered for the student who wishes to secure a broad, general training in many important branches of agriculture without specializing unduly in any particular

department. To this end, it is assumed that the student will take during his four years an average of about two semester courses in at least ten of the following departments: Agronomy, Animal Husbandry, Agricultural Chemistry, Agricultural Economics, Botany, Chemistry, Dairy Husbandry, Economics, English, Entomology, Forestry, Horticulture, Mathematics, Physics, Poultry Husbandry, Zoölogy. A majority of these covering work in other colleges is required during the freshman and sophomore years, but several in the College of Agriculture may be elected in the freshman or sophomore year. In addition to such of these courses as have been completed by the end of the sophomore year, obviously other advanced and supplementary courses will be required in the junior and senior years. However, a considerably greater choice of subject-matter is allowed here than in the more specialized curricula.

Students who expect to engage in farming will find this so-called general curriculum with its wide range of fundamental courses a most profitable one. This curriculum should also prepare for extension work like that of a county agent, a boys' and girls' club leader, a marketing or farm management investigator, or a soils and crops specialist. For those expecting to specialize later in graduate work, the broad foundation of fundamental subject-matter made possible by this curriculum should provide a most desirable background.

During the freshman and sophomore years the student should complete at least three introductory courses in the first semesters and four in the second semesters. In the freshman year this might include any of those listed except Forestry 5 and 6, and in the sophomore year the elective list is increased by Agronomy, both semesters, Entomology 1, Agricultural Engineering 4, Agricultural Chemistry 2 or 4 and Geology (7).

Agricultural and Biological Chemistry.—Students majoring in this curriculum receive training in the various branches of general chemistry and in their application to the growth and development of plants and animals. The methods used in the chemical analysis of plants and agricultural products and in the study of animal nutrition and metabolism are given especial attention. Aside from the technical and general requirements, numerous electives are offered which enable the student to obtain a more general training, to select work in the

applied departments of the college, or to obtain the professional work needed for teaching in the schools of New Hampshire. The curriculum is designed to provide a thorough foundation for those expecting to prepare themselves for teaching and research in colleges and experiment stations. The department is fortunate in being associated with the experiment station and in that connection having charge of the chemical analysis of feeds and fertilizers for the State Department of Agriculture. This furnishes an opportunity for the student to come in contact with the inspection and research work of the department and to have the benefit of its equipment.

Students who expect to pursue this curriculum must take Mathematics 5, 6 in the freshman year and Chemistry 47, 48 in the sophomore year. Additional credits as needed may be elected from the introductory courses.

Animal Husbandry.—This curriculum is offered to students who wish a specialized training in the practical and intelligent management, selection, breeding and feeding of livestock, including horses, beef and dual-purpose cattle, sheep and swine. Special attention is given to studies which will prepare students for various lines of work, including the extension service, production and sales work with feed concerns and packing plants, the management of estates and general livestock farms.

Many have found this curriculum excellent preparation for advanced work in veterinary science, civil service, and other specialized lines.

During the junior and senior years each student is advised to elect as many courses in dairy production as possible, thus obtaining fundamental information about a closely-related type of enterprise.

Freshmen should complete Animal Husbandry 1 the first semester, and Forestry 2 or Horticulture 2 or 14 the second semester. In the sophomore year Entomology 1 should be completed in the first semester, together with Agricultural Engineering or Poultry Husbandry. During the second semester, Agricultural Chemistry 4 is expected and Animal Husbandry 2. Geology may be added to the electives already suggested for the freshman year to make possible the completion of two more courses. Dairy Husbandry 2 is not advised in this curriculum.

Botany and Bacteriology.—The curriculum is flexible and so arranged that students in either the College of Agriculture or the College of Liberal Arts may take major work in the department. The work taken may be broadly cultural or the student may specialize with a view to teaching, or in preparation for graduate study.

Introductory or elective courses in the freshman and sophomore years may be selected largely subject to the desires of the student. An extra year of English will be required not later than the junior year.

Dairy Husbandry.—Students majoring in dairy husbandry are offered specialized courses in (1) Dairy Production and (2) Dairy Products or Dairy Manufactures. Dairy Production courses include a study of the dairy breeds and all phases of care, feeding, management, herd analysis, judging and selection of dairy cattle. Dairy Products courses include a study of market milk, tests of dairy products, including the use of the Mojonnier Milk Tester, dairy bacteriology, and the manufacture of butter, cheese and ice cream. The dairy herd on the campus together with the daily-operating market milk pasteurizing and ice cream units in the Dairy Building contribute to the practical training of students in any one of several lines of the dairy industry.

Freshmen are advised to take Mathematics 5 and 6 if they intend to major in Dairy Products or Dairy Manufactures, which makes a full schedule for the year. Other students should complete Animal Husbandry 1 and Forestry 2 or Horticulture 2 or 14. All dairy students must complete Animal Husbandry 1 as freshmen or sophomores, and Agricultural Chemistry 4 as sophomores. Production students in every case should complete Entomology 1 as sophomores. Other introductory courses for the two years may be selected from such titles as the following: Agricultural Engineering 1 and 4, Poultry Husbandry 1, and Geology (7). Dairy Husbandry 2 is not intended for Dairy Husbandry majors.

Entomology.—The Department of Entomology offers various courses and selections of courses for students who wish to major in entomology, and especially for students who desire to secure training through which they can later take up one or another aspect of entomology as a profession.

There are several aspects into which entomology naturally divides itself. Each of these represents a definite field of specialization, and an opportunity for professional work according to the training that the student has had. There is definite advantage in deciding on this major early in the course of undergraduate training. Equipment for a professional position is based on suitable undergraduate work to be followed by more fully specialized graduate work.

Outlines of specific, suggested courses of study are available to the student on application at the department office. These outlines refer to the following specialized fields of entomological training, any one of which is offered by the department to students majoring in entomology.

General Entomology.—A broad selection of courses which furnish a suitable background for later specialization in the following: (a) life history studies of insects; (b) control of animal parasites; (c) systematic entomology; and (d) the relation of insects to their environment. Students who are interested in entomology in general, but have not yet determined what special field they might wish to enter, may take this grouping of courses.

Toxicology.—This specialized field relates particularly to the control of insects by chemical means. It is a professional field that is rapidly developing. A student who elects it will be given extensive training in chemistry as well as entomology, and in graduate work will be expected to give considerable attention to insect physiology.

Medical Entomology.—The undergraduate training looking toward specialization in medical entomology includes courses in zoölogy and human physiology, as well as studies in the life histories of important insects that serve as the transmitting agents for various human diseases and in the means of control of such diseases through control of the insects that transmit them.

Forest Entomology.—This aspect of entomology is closely related to the study of forest practices. Students who specialize in this field will take certain courses in forestry as well as fundamental entomology and specialized studies in the life histories of insects attacking forest and shade trees.

Biologic Control.—Certain fundamentals of general entomology are taken up in the subjects studied by a student majoring in this aspect of entomology. In addition special attention is given to the relation of various natural enemies to insects, including insect parasites and the effects of fungous and bacterial diseases upon insect life and abundance.

In the freshman year, Mathematics 5 and 6 should be completed. In the sophomore year, Entomology 1 is required. Other introductory courses may be selected for additional credits to meet the student's special interest needs.

Forestry.—The training and instructional work in forestry is intended to meet the needs of three classes of students: (1) those who wish to secure four years' training in the science and practice of forestry; (2) those who wish to fit themselves for positions in the lumber business; and (3) those who desire a foundation for professional or graduate work in forestry. All students take the same work during the first two years, and their courses of study as juniors and seniors must depend on their records as freshmen and sophomores.

General Group.—This group includes those students who wish to secure a sound training in forestry, but who do not care to spend more than four years in college. Considerable latitude is given in the courses which the student may elect, but his efforts are directed toward securing a general education which will be of assistance to him in case he goes into some other line of work after graduation.

Business Group.—The student who chooses this course of study receives a satisfactory training in the fundamental principles of forestry, and, in addition, elects certain courses in the field of business administration.

Professional Group.—This course of study is designed to fit the student for advanced work at some other institution, where he will be able to satisfy the requirements for an M.F. degree in one year. Students who plan to enter the United States Forest Service, to become teachers, research workers, or consulting foresters, should elect this course. The requirements, however, are high for this group, and only the best students will be encouraged to undertake it.

All freshmen should take Forestry 5 and 6. Sophomores will take Civil Engineering 7 and 8, Entomology 1, and Forestry 9 and 10. Agricultural Chemistry 2, Agricultural Engineering 4, Geology (7) or other introductory courses may be elected.

HORTICULTURE.—The Department of Horticulture offers instruction which, by thorough preparation in fundamentals, fits the student for intelligent and resourceful production and marketing of fruits and vegetables. Students of superior ability will find it possible by supplementing their undergraduate work with postgraduate study to prepare for professional positions in teaching, research, or extension work.

The course in ornamental horticulture and floriculture is designed to fit the student for work on large private estates or with nursery companies. It does not presume to prepare professional landscape architects.

Major students in this department must elect a minimum of 25 semester credits of advanced horticultural and related courses. In addition, because fundamental to all horticultural work, the study of economics, of plant physiology, and of the control of insects and diseases is required of all students. Similarly, subject-matter in other departments related to the student's chosen field of endeavor may be required at the discretion of the head of the department.

Mathematics 5 and 6 is to be preferred in the freshman year for students who expect to do graduate work. Other students should elect some of the introductory courses for additional credits. Agricultural Engineering and any of the horticultural courses listed are recommended.

In the sophomore year, Entomology 1 and Agricultural Chemistry 2 should be completed. Additional credits will then be obtained from the introductory courses previously mentioned and from those in the sophomore list, like Animal Husbandry 1, Poultry Husbandry 1, in the first semester; and Dairy Husbandry 2, Forestry 2, Geology (7) and Horticulture 28 in the second semester.

POULTRY HUSBANDRY.—The curriculum in poultry husbandry has been designed to offer students fundamental and special training in the practical as well as professional fields of poultry. The courses are also offered to those majoring in other departments.

A brief but comprehensive period of practical work is offered for those who lack sufficient experience in the actual care and production of chicks and laying birds. All of the facilities of the University poultry plant are available for such students.

During the freshman or sophomore year it is necessary that Poultry Husbandry 1 be completed, since it is a prerequisite for many of the other advanced courses in this department. Agricultural Chemistry 4 should be completed. Any of the other introductory courses in the freshman list are recommended for additional credits except Forestry 5 and 6; and in the sophomore year Agricultural Engineering 4, Entomology 1, and Geology (7) may be added to the courses available.

Teacher Training.—Under the provisions of the Smith-Hughes Act, the University of New Hampshire has been designated as the institution in this State for the training of teachers of agriculture. This curriculum gives the young man a broad training in the fundamental sciences and in general agriculture. In addition, he receives professional training in such educational subjects as psychology, principles of education, methods of teaching in supervised practice teaching. Students who complete the curriculum and who have had the requisite amount of practical experience on a farm will be accredited as teachers.

There is a rapidly increasing demand for teachers of agriculture in our secondary schools. Local school boards are beginning to appreciate more fully the value of instruction in agriculture both for the boys who will engage in agriculture after leaving high school, and as electives to maintain the interest of those young men who may wish to take at the University further education in this basic industry. As a result, there are many good positions open for the young men who wish to make the teaching of agriculture a profession.

Freshmen may elect any one of the introductory courses for each semester except Forestry 5 and 6 and Horticulture 26. In the sophomore year more of these same courses should be completed with the addition of Geology (7) and possibly Agricultural Engineering 4, Animal Husbandry 2 and Entomology 1.

COLLEGE OF AGRICULTURE

Freshman Year

All Curricula

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Freshman Assembly (*Required First Semester*)		
Mil. Sci. 1, 2	1½	1½
Phys. Ed. 31, 32	½	½
Bot. 1, 2 (*General*)	4	4
Chem. 1, 2 (*Inorganic*)	4	4
Eng. 1, 2 (*Composition*)	3	3
Math. 5, 6 (*First Year*) or		
Math. 21, 22 (*Elements of Analysis*)	3–5	3–5
Elective	0–2	0–2
	18	18

Introductory courses scheduled to satisfy curricula requirements for the freshman year.

First Semester

Forestry 5 [3]
Agricultural Engineering 1 [3]
Animal Husbandry 1 [3]
Poultry Husbandry 1 [3]

Second Semester

Forestry 6 [3]
Dairy Husbandry 2 [3]
Forestry 2 [3]
Horticulture 2 or 14 [3]
Horticulture 26 [3]

Sophomore Year

All Curricula

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Mil. Sci. 3, 4	1½	1½
Phys. Ed. 33, 34	½	½
Phys. 1, 2 (*Introductory*)	4	4
Agr. Chem. 1 (*Introductory*) or Chem. 47, 48 (*Organic*)	5	0–5
Zoöl. 48 (*General*)		3
Elective	7	4–9
	18	18

Introductory courses scheduled to satisfy curricula requirements for the sophomore year.

First Semester

Agronomy 1 [3]
Agricultural Engineering 1 [3]
Animal Husbandry 1 [3]
Civil Engineering 7 [2]
Forestry 9 [3]
Education 41 [3]
Entomology 1 [3]
Poultry Husbandry 1 [3]

Second Semester

Agronomy 2 [2]
Agricultural Engineering 4 [1]
Animal Husbandry 2 [1]
Civil Engineering 8 [2]
Forestry 10 [3]
Agricultural Chemistry 2 or 4 [3]
Dairy Husbandry 2 [3]
Forestry 2 [3]
Geology (7) [3]
Horticulture 2 or 14 [3]
Horticulture 28 [3]

COLLEGE OF AGRICULTURE

GENERAL AGRICULTURE

Junior Year

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Agr. Econ. 1 (*Rural*)	2	
Agr. Econ. 3 (*Farm Accounting*)	2	
Agron. 1, 2 (*Soils; Fertilizers*)	3	2
A. H. 3, 2 (*Feeds Judging*)	3	1
Econ. 1, 2 (*Principles*)	3	3
Elective	5	12
	18	18
Prescribed or Recommended Electives		
Agron. 3, 4 (*Crop Production; Field Crops*)	3	3
Agron. 5 (*Soil Utilization*)	2	
Agron. 7, 8 (*Agronomic Literature*)	Arr.	Arr.
A. H. 9, 10 (*Horses, Beef Cattle; Sheep and Swine*)	Arr.	Arr.
Bact. 1, 2 (*General; Applied*)	4	4
D. H. 7, 10 (*Butter and Cheese; Bacteriology*)	2	4
D. H. 13, 14 (*Judging*)	1	1
Ent. 53, 52 (*Animal; Orchard, Garden*)	2	2
Hort. 1 (*Pomology*)	3	
P. H. 3, 4 (*Problems*)	1	1
Zoöl. 49 (*Genetics*)	2	

Senior Year

Agr. Econ. 5, 4 (*Coöp. Marketing; Farm Management*)	2	3
Eng. 41, (35) (*Expos. Writing; Public Speaking*)	2	3
Elective	14	12
	18	18
Prescribed or Recommended Electives		
Agr. Econ. 7, 8 (*Statistics; Rural Community*)	1	3
Agr. Eng. 3, 2 (*Electricity; Power and Machinery*)	3	2
D. H. 3, 4 (*Cattle; Milk Production*)	3	3
D. H. 5, 6 (*Market Milk; Ice Cream*)	3	3
Met. 2 (*Elementary*)		2
Others from junior list		

COLLEGE OF AGRICULTURE

AGRICULTURAL AND BIOLOGICAL CHEMISTRY

Junior Year

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Agron. 1, 2 (*Soils; Fertilizers*)	3	2
Bact. 1, 2 (*General; Applied*)	4	4
Chem. 25, 26 (*Quantitative and Qualitative*)	3	3
Lang. (*French or German*)	3	3
Elective	5	6
	18	18
Prescribed or Recommended Electives		
Agron. 3, 4 (*Crop Production; Field Crops*)	3	3
A. H. 3 (*Feeds*)	3	
D. H. 3, 2 (*Dairy Cattle; Fundamentals*)	3	3
Geol. 1, 2 (*Principles*)	4	4
Hort. 2 or 14 (*Pomology; Vegetable Gardening*)		3

Senior Year

Agr. Chem. 51, 52 (*Physiological*)	5	5
Agr. Chem. 53, 54 (*Agricultural Analysis*)	4	4
Eng. 41 (35) (*Expos. Writing; Public Speaking*)	2	3
Elective	7	6
	18	18
Prescribed or Recommended Electives		
Agr. Chem. 55 (*Plant Chemistry*)	4	
Bot. 4 (*Physiology*)		4
Chem. 55, 56 (*Advanced Organic*)	3	3
Chem. 83, 84 (*Physical*)	5	5
Zoöl. 59, 60 (*Physiology*)	4	4

UNIVERSITY OF NEW HAMPSHIRE

ANIMAL HUSBANDRY

Junior Year

	First Semester Credits	Second Semester Credits
Convocation (*Required*)		
Agron. 1, 2 (*Soils; Fertilizers*)	3	2
Agron. 3 (*Crop Production*)	3	
A. H. 5, 6 (*Veterinary Science*)	3	3
A. H. 3 (*Feeds*)	3	
A. H. 4 (*Advanced Judging*)		1
Econ. 1, 2 (*Principles*)	3	3
Elective	3	9
	18	18

Prescribed or Recommended Electives

Agr. Econ. 1 (*Rural*)	2	
Agr. Econ. 3 (*Farm Accounting*)	2	
Agron. 4 (*Field Crops*)		3
D. H. 14 (*Judging*)		1
Econ. 24 (*Marketing*)		3
For. 2 (*Principles*)		3
Zoöl. 49 (*Genetics*)	2	

Senior Year

Agr. Econ. 5, 4 (*Coöp. Marketing; Farm Management*)	2	3
A. H. 7, 8 (*Breeding; Markets*)	3	2
A. H. 9, 10 (*Horses, Beef; Sheep, Swine*)	3	3
A. H. 12 (*Seminar*)		1
D. H. 3, 4 (*Dairy Cattle; Milk Production*)	3	3
Eng. 41, (35) (*Expos. Writing; Public Speaking*)	2	3
Elective	5	3
	18	18

Prescribed or Recommended Electives

Agr. Eng. 3, 2 (*Electricity; Power and Machinery*)	3	3
Met. 2 (*Elementary*)		2

COLLEGE OF AGRICULTURE

BOTANY AND BACTERIOLOGY

Junior Year

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Eng. (*Advanced*)	3	3
Lang. (*French or German*)	3	3
Elective	12	12
	18	18

Prescribed or Recommended Electives

Agron. 1, 2 (*Soils; Fertilizers*)	3	2
Bact. 1, 2 (*General; Applied*)	4	4
Bot. 3, 4 (*Histology; Physiology*)	2	4
Chem. 25, 26 (*Quantitative and Qualitative*)	3	3
Chem. 47, 48 (*Organic*)	5	5
Ent. 1 (*Principles*)	3	
Ent. 54 (*Medical Entomology*)		2
Geol. 1, 2 (*Principles*)	4	4
Hort. 94 (*Plant Breeding*)		2
Zoöl. 1, 2 (*Principles of Zoölogy*)	4	4
Zoöl. 49 (*Genetics*)	2	

Senior Year — Botany

Bact. 1, 2 (*General; Applied*)	4	4
Bot. 5, 52 (*Plant Pathology; Systematic*)	3	2
Bot. 53, 54 (*Advanced*)	4	4
Elective	7	8
	18	18

Senior Year — Bacteriology

Bact. 51, 52 (*Advanced*)	4	4
Zoöl. 17, 18 (*Human Anatomy; Physiology*)	3	3
Zoöl. 15, 16 (*Comparative Anatomy of Vertebrates*)	2	2
Elective	9	9
	18	18

Prescribed or Recommended Electives

Agr. Chem. 51, 52 (*Physiological*)	5	5
Eng. 41 (35) (*Expos. Writing; Public Speaking*)	2	3
Geol. 1, 2 (*Principles*)	4	4
Ger. 5, 6 (*Scientific German*)	3	3
Met. 2 (*Elementary*)		2
Phys. 14 (*Elementary Optics and Photography*)		3

UNIVERSITY OF NEW HAMPSHIRE

DAIRY HUSBANDRY

Junior Year

	First Semester Credits	Second Semester Credits
Convocation (*Required*)		
Bact. 1 (*General*)	4	
D. H. 7, 10 (*Butter, Cheese; Bacteriology*)	2	4
D. H. 13, 14 (*Judging*)	1	1
Econ. 1, 2 (*Principles*)	3	3
Elective	8	10
	18	18
Prescribed or Recommended Electives		
Acct. 1, 2 (*Elementary*)	3	3
Agr. Econ. 1 (*Rural*)	2	
Agr. Econ. 3 (*Farm Accounting*)	2	
Agron. 1, 2 (*Soils; Fertilizers*)	3	2
A. H. 5, 6 (*Veterinary Science*)	3	3
Bact. 2 (*Applied*)		4
Ent. 53 (*Insects of Domestic Animals*)	2	
Zoöl. 49 (*Genetics*)	2	

Senior Year

Agr. Econ. 5, 4 (*Coöp. Marketing; Farm Management*)	3	3
A. H. 3 (*Feeds*)	3	
D. H. 3, 4 (*Cattle; Milk Production*)	3	3
D. H. 5, 6 (*Market Milk; Ice Cream*)	3	3
D. H. 12 (*Seminar*)		2
D. H. 16 (*Advanced Dairy Science*)		2
Eng. 41 (35) (*Expos. Writing; Public Speaking*)	2	3
Elective	4	2
	18	18
Prescribed or Recommended Electives		
Agron. 3 (*Crop Production*)	3	
Agr. Eng. 3, 2 (*Electricity; Power and Machinery*)	3	2
Met. 2 (*Elementary*)		2
Others from junior list		

COLLEGE OF AGRICULTURE

ENTOMOLOGY

Junior Year

	First Semester Credits	Second Semester Credits
Convocation (*Required*)		
Bact. 1, 2 (*General; Applied*)	4	4
Econ. 1, 2 (*Principles*)	3	3
Ent. 57, 58 (*Advanced*)	4	4
Elective	7	7
	18	18
Prescribed or Recommended Electives		
Bot. 5, 54 (*Pathology*)	3	3
Chem. 25, 26 (*Quantitative and Qualitative*)	3	3
Chem. 47, 48 (*Organic*)	5	5
Chem. 81, 82 (*Physical*)	2	2
Ent. 54 (*Household*)		2
Ent. 56 (*Forest*)		2
Forestry 7, 8 (*Mensuration*) or Forestry 9, 10 (*Silviculture*)	3	3
Lang. (*French or German*)	3	3
Zoöl. 3, 4 (*Hygiene and Sanitation*)	3	3

Senior Year

Eng. 41, (35) (*Expos. Writing; Public Speaking*)	2	3
Ent. 59, 60 (*Advanced*)	2–5	2–5
Lang. (*French or German*)	3	3
Elective	8–11	7–10
	18	18
Prescribed or Recommended Electives		
Agr. Chem. 51, 52 (*Physiological*)	5	5
Bot. 3, 4 (*Histology; Physiology*)	2	4
Chem. 83, 84 (*Physical*)	5	5
Zoöl. 51, 52 (*Invertebrates*)	3	3
Zoöl. 53, 54 (*Histology*)	4	4

UNIVERSITY OF NEW HAMPSHIRE

FORESTRY

Junior Year

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Agron. 1 (*Soils*)	3	
Bot. 4 (*Plant Physiology*)		4
Econ. 1, 2 (*Principles*)	3	3
For. 7, 8 (*Mensuration*) or		
For. 9, 10 (*Silviculture*)	3	3
Elective	9	8
	18	18

Prescribed or Recommended Electives

Bot. 3, 52 (*Histology; Systematic*)	2	2
Ent. 1, 56 (*Principles; Forest*)	3	2
For. 11, 12 (*Utilization*)	3	3
For. 13, 14 (*Improvements; Fish and Game*)	2	2
Lang. (*French or German*)	3	3
M. E. S4 (*Wood Shop*)		3
M. E. S12 (*Forge Shop*)		
Home Econ. 21 (*Camp Cooking*)	1	
For. 22 (*Summer Camp*) 8 weeks		8

Senior Year

Eng. 41, (35) (*Expos. Writing; Public Speaking*)	2	3
For. 19, 20 (*Management*)	4	4
Elective	8	7
	14	14

Prescribed or Recommended Electives

Bot. 5 (*Pathology*)	3	
For. 15, 16 (*Thesis*)	2	2
For. 18 (*History*)		3
Met. 2 (*Elementary*)		2
Others from junior list		

COLLEGE OF AGRICULTURE

HORTICULTURE

Junior Year

	First Semester Credits	Second Semester Credits
Convocation (*Required*)		
Agron. 1, 2 (*Soils; Fertilizers*)	3	2
Bact. 1 (*General*)	4	
Econ. 1, 2 (*Principles*)	3	3
Hort. 44 (*Practice*)		5
Ent. 52 (*Orchard and Garden*)		2
Zoöl. 49 (*Genetics*)	2	
Elective	6	6
	18	18
Prescribed or Recommended Electives		
Agr. Econ. 3 (*Accounting*)	2	
Agron. 3 (*Crop Production*)	3	
Bot. 52 (*Systematic*)		2
Hort. 3, 2 (*Fruit Judging; Pomology*)	2	3
Hort. 27, 26 (*Ornamentals*)	3	3
Hort. 38 (*Floriculture*)		1
Hort. 48 (*Beekeeping*)		2
Met. 2 (*Elementary*)		2
P. H. 8 (*Incubation*)		3

Senior Year

Agr. Econ. 5, 4 (*Coöp. Marketing; Farm Management*)	2	3
Bot. 5, 4 (*Pathology; Physiology*)	3	4
Eng. 41, (35) (*Expos. Writing; Public Speaking*)	2	3
Ent. 52 (*Orchard and Garden*)		2
Hort. 91, 92 (*Seminar*)	2	2
Elective	9	4
	18	18
Prescribed or Recommended Electives		
Agr. Econ. 1 (*Rural*)	2	
Agr. Eng. 3 (*Electricity*)	3	
Hort. 1, 54 (*Pomology; Advanced*)	3	3
Hort. 39 (*Greenhouse*)	3	
Hort. 49 (*Beekeeping*)	2	
Hort. 65 (*Advanced Vegetable Gardening*)	3	

UNIVERSITY OF NEW HAMPSHIRE

POULTRY HUSBANDRY

Junior Year

	First Semester Credits	Second Semester Credits
Convocation (*Required*)		
Agr. Econ. 3 (*Farm Accounting*)	2	
Econ. 1, 2 (*Principles*)	3	3
P. H. 7, 6 (*Judging; Breeding*)	3	2
P. H. 13, 14 (*Management; Practice*)	3	4
Zoöl. 49 (*Genetics*)	2	
Elective	5	9
	18	18

Prescribed or Recommended Electives

Agr. Economics 5 (*Coöp. Marketing*)	2	
Agr. Eng. 3, 2 (*Electricity; Power and Machinery*)	3	2
Agron. 1, 2 (*Soils; Fertilizers*)	3	2
Agron. 3, 4 (*Crop Production; Field Crops*)	3	3
A. H. 3 (*Feeds*)	3	
Bact. 1, 2 (*General; Applied*)	4	4
P. H. 12 (*Housing*)		2

Senior Year

Eng. 41, (35) (*Expos. Writing; Public Speaking*)	2	3
P. H. 9, 8 (*Marketing; Incubation*)	2	3
P. H. 15, 10 (*Diseases; Feeding*)	4	3
P. H. 17, 18 (*Seminar*)	1	1
Elective	9	8
	18	18

Prescribed or Recommended Electives

Agr. Econ. 7, 4 (*Statistics; Farm Management*)	1	3
Met. 2 (*Elementary*)		2
P. H. 3, 4 (*Problems*)	1	1
Others from junior list		

TEACHER-TRAINING

Junior Year

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Agr. Econ. 3 (*Farm Accounting*)	2	
Agr. Econ. 5 (*Coöp. Marketing*)	2	
Agron. 1, 2 (*Soils; Fertilizers*)	3	2
Agron. 4 (*Field Crops*)		3
A. H. 3 (*Feeds*)	3	
D. H. 4 (*Milk Production*)		3
Educ. 41, 42 (*Psychological Principles of Secondary Education*)	3	3
Educ. 92 (*Problems in Teaching of High School Agriculture*)		3
M. E. S23 (*Forge Shop*)	2	
P. H. 11 (*Poultry for Teachers*)	2	
Elective	1	4
	18	18

Prescribed or Recommended Electives

P. H. 13 (*Management*)	3	

For others, refer to lists in General Agriculture.

Senior Year

Agr. Econ. 4 (*Farm Management*)		3
Agr. Econ. 8(*Rural Community*)		3
Agr. Eng. 6 (*Farm Shop*)		2
D. H. 14 (*Judging*)		1
Educ. 93, (45) (*Supervised Teaching; State Law*)	18	2
Elective		7
	18	18

COLLEGE OF LIBERAL ARTS

C. Floyd Jackson, Dean

DEPARTMENTS

Economics and Accounting
Education
English
Geology
History
Home Economics
Languages
Music
Philosophy and Psychology
Physical Education for Women
Political Science
Sociology
Zoölogy

In the College of Liberal Arts the following curricula are offered:

General Liberal Arts Curriculum.—This curriculum provides a general college training which especially prepares for citizenship, secondary school teaching, business, or graduate study. By means of the group system of elective studies an opportunity is given the student to secure an A.B. or B.S. degree.

Education—Teacher Training Curriculum.—This curriculum has been prepared to guide those who wish to prepare for teaching in junior and senior high schools. It is sufficiently flexible to provide the differentiation necessary to meet the needs of those who may be planning to teach: (1) English and the foreign languages, (2) English and the social sciences, (3) Mathematics and the biological and physical sciences, or (4) the commercial subjects.

The New Hampshire State Board of Education grants a license to teach in New Hampshire secondary schools to candidates whose courses have included *twelve semester hours* of college work in Education. All candidates must pass the examination set by the State Board in Program of Studies and School Law. They may offer in lieu of examinations certified college courses in Educational Psychology, Methods of Teaching (General or Special) and Secondary Education or School Management.

The following courses may be considered as work in Education: Educational Sociology, Educational Psychology, Practice Teaching, Methods of Teaching, History of Education, School Law, School Management, General Methods Course, Special Methods Course, and work in Tests and Measurements.

Home Economics Curricula.—The curricula in home economics are planned to meet the demands for scientific training in homemaking; also special curricula are outlined for students who wish to enter fields of professional activity in educational and institutional work. Several courses are offered as electives for those who do not wish to major in home economics but who desire to study one or more phases of homemaking.

The courses in home economics are based upon the physical, biological, and social sciences. The technical work in foods, nutrition, and dietetics is based upon the principles of chemistry and physiology; that in sanitation necessitates a knowledge of chemistry and bacteriology. Home administration and the care and education of children demand knowledge of the principles of human nutrition and dietetics, as well as of economics, psychology and sociology. A nursery school-kindergarten furnishes a laboratory for child study and guidance. The study of color and design is fundamental to the courses in costume design and house decoration.

The home economics curricula offered are as follows:

(1) Teacher Training Curriculum. To prepare students to teach home economics in junior and senior high schools.

(2) Institutional Management Curriculum. To train students for positions as dietitians and managers in public institutions, such as college dormitories, hospitals, tearooms, cafeterias, etc.

(3) Extension Training Curriculum. To prepare students to become home demonstration and boys' and girls' club agents.

Students wishing to train for homemaking and child guidance should take a General Liberal Arts curriculum, majoring in home economics. (See page 98)

General Business Curriculum.—Students who wish to prepare for a business career should take the curriculum in general business.

This curriculum has been planned so as to offer the foundation for a broad cultural education during the first and second years of the curriculum, and to introduce the student to the business courses in the junior and senior years.

Pre-Medical Curriculum.—This curriculum is offered to meet the needs of students who are preparing for the medical or dental professions.

It is highly desirable that a student spend four years at this institution in preparation for a medical training, although some medical colleges do not require a degree for entrance. The four years of pre-medical work will, however, give the student a good cultural foundation for his future medical work. Students who wish to take this curriculum must obtain the permission of the Committee on Pre-Medical Instruction.

Students following the prescribed pre-medical curriculum will be eligible for entrance into any Class A medical school. However, owing to the crowded condition of most medical schools, only those students standing in the upper third of their class during their pre-medical work may be admitted. Some medical institutions restrict the number of students admitted from any one pre-medical school. Preference is always given to those students having the most complete training and highest standing in their pre-medical work.

Students desiring to prepare for dental school may do so by concentrating certain courses in the first two years of the pre-medical curriculum.

Students who are interested in nursing and technician training should major in the Department of Zoölogy, where they will be allowed to pursue a modification of the pre-medical curriculum.

Social Service Curriculum.—Students may prepare for social work as a career under one of three plans. (a) In every way the most desirable is to take the full four years at the University of New Hampshire as a cultural background preparation for a two year course in a recognized school of social work. (b) Failing the necessary resources for such extended graduate training, it is possible to acquire the fundamental social service principles and techniques by taking a sociology major at the University of New Hampshire, including the social work courses (61, 76, 83, 98). (c) To meet

the needs of students desiring supervised urban training, three years may be taken at the University of New Hampshire, and the fourth at Simmons College or another approved school of social work. The year's residence requirement will be waived and the degree of bachelor of science will be awarded by the University of New Hampshire on the successful completion of the fourth year in such a school.

Secretarial Curriculum.—This curriculum has been prepared to give a course in secretarial training, based as much as is practical on a liberal education. Its primary purpose is to train students for secretarial positions. It combines the technical training of a business secretary with that of a liberal arts education.

UNIVERSITY OF NEW HAMPSHIRE

GENERAL LIBERAL ARTS CURRICULUM

Freshman Year
All Curricula

	First Semester Credits	Second Semester Credits
Convocation (*Required*)		
Freshman Assembly (*Required First Semester*)		
Mil. Sci. 1, 2	1½	1½
Phys. Ed. 31, 32 (*For Men*)	½	½
Phys. Ed. 1, 2 (*For Women*)	2	2
Eng. 1, 2 (*Composition*)	3	3
Hist. 1, 2 (*Contemporary Civilization*)	4	4
*A biological science (*Bot. 1, 2 or Zoöl. 1, 2*) or a physical science (*Chem. 1, 2; Geol. 1, 2; or Phys. 1, 2*)	4	4
Suggested Electives:		
Bot. 1, 2 (*General Botany*)	4	4
Chem. 1, 2 (*Inorganic Chemistry*)	4	4
Eng. 3, 4 (*Survey of English Literature*)	3	3
Geol. 1, 2 (*Principles of Geology*)	4	4
Hist. 3, 4 (*Modern European History*)	3	3
H. E. 1, 2 (*Homemaking*)	3	3
‡Lang. (*French, German Latin* or *Spanish*)	3	3
**Math. 1, 2 (*First Year Math.*) or Math. 31, 32 (*Elem. Mathematical Anal.*)	3	3
Phys. 1, 2 (*Introductory Physics*)	4	4
Zoöl. 1, 2 (*Basic Principles of Animal Life*)	4	4
	16	16

Sophomore Year

			First Semester Credits	Second Semester Credits
Convocation (*Required*)				
Mil. Sci. 3, 4			1½	1½
Phys. Ed. 33, 34 (*For Men*)			½	½
Phys. Ed. 3, 4 (*For Women*)			1	1
†Eng.			3	3
Elect one year's work from each of the three following groups:				
Group	I.	Math. (*One year*)	3	3
		Hist. (*One year*)	3	3
		Lang. (*French, German, Greek, Latin, Spanish*) (*One year*)	3	3
		Eng. (*A third year of English*)	3	3
Group	II.	*A biological science (*Bot. 1, 2; or Zoöl. 1, 2*) or a physical science (*Chem. 1, 2; Geol. 1, 2; or Phys. 1, 2*)	4	4

* Students electing a biological science during their freshman year must elect a physical science during their sophomore year, or *vice versa.*

‡ All students are required to pass a reading test in French, German, Latin or Spanish before graduation. This test will be based on two years of secondary school language training or the equivalent. Students not passing this test during the Freshman Week examinations are advised to elect language their freshman year. Students will be assigned to language courses on the basis of their grades in the Language Placement Examination given during Freshman Week.

** Open only to students with one year each of algebra and plane geometry. Students who wish to continue mathematics beyond the freshman year should take Math. 1, 2.

† A second year's work in English is required but may be taken during the sophomore, junior or senior year. See special Language and English requirements.

Group III.	Econ. (*One year*)	3	3
	Educ. (*One year*)	3	3
	Pol. Sci. (*One year*)	3	3
	Phil. (*One year*)	3	3
	Psych. (*One year*)	3	3
	Soc. (*One year*)	3	3
Electives to meet semester requirements			
		16	16

Junior Year

Convocation (*Required*)		
Phys. Ed. 5, 6 (*For Women*)	1	1
Major course: (*First major course with grade of 75 or better*)	3	3
Major course: (*Second major course with grade of 75 or better*)	3	3
Electives to meet semester requirements		
	16	16

Senior Year

Major course: (*Third major course with grade of 75 or better*)	3	3
Major course: (*Fourth major course with grade of 75 or better*)	3	3
Electives to meet semester requirements		
	16	16

UNIVERSITY OF NEW HAMPSHIRE

HOME ECONOMICS CURRICULA

A. Teacher Training Curriculum
B. Institutional Management Curriculum
C. Extension Training Curriculum
D. *General Arts Major in Home Economics

Freshman Year

	First Semester Credits	*Second Semester Credits*
See Freshman Requirements, page 98		
Suggested Elective:		
H. E. 1, 2 (*Homemaking*)	3	3
	16	16

Sophomore Year

Convocation (*Required*)		
Phys. Ed. 3, 4	1	1
**Eng. (*A second year of English*)	3	3
Chem. 1, 2 (*Inorganic Chemistry*)	4	4
H. E. 3, 4 (*Clothing Selection*)	3	3
H. E. 15, 16 (*Foods*)	3	3
Suggested electives:		
§Educ. 41, 42 (*Psych. Prin. of Secondary Educ.*)	3	3
¶Psych. 51 (*Psych. of Childhood and Adol.*)	3	
¶Psych. 62 (*Mental Hygiene*)		3
	16	16

Junior Year

Convocation (*Required*)		
Phys. Ed. 5, 6	1	1
Agr. Chem. 5 (*Organic and Biol. Chem.*)	5	
‖Agr. Chem. 6 (*Chem. of Food and Nutrition*)		3
H. E. 20 (*Dietetics*)		3
§Educ. 51, 52 (*Soc. Prin. of Secondary Educ.*)	3	3
H. E. 31, 32 (*Home Building and Furnishing*)	3	3
Electives to meet semester requirements		
	16	16

* Students taking the General Arts curriculum in Home Economics should follow the General Liberal Arts Curriculum on page 98.
** A second year of English must be taken before graduation.
¶ Institutional and Extension majors only.
§ Teacher Training majors only.
‖ Required of students who intend to become hospital dietitians; elective for others.

COLLEGE OF LIBERAL ARTS

TEACHER TRAINING CURRICULUM

Senior Year

	First Semester Credits		Second Semester Credits
H. E. 35 (*Home Management House*)	3		
H. E. 25 (*Child Development*)	3		
H. E.-Ed. 91 (*Problems in the Teaching of High School Home Economics*)	3		
H. E.-Ed. 94 (*Supervised Teaching*)			10
H. E.-Ed. 96 (*Seminar*)			3
Suggested Elective:			
Educ. 45 (*N. H. State Program of Studies and School Law*)	2	or	2
Electives to meet semester requirements			
	16		16

INSTITUTIONAL MANAGEMENT CURRICULUM

H. E. (35) (*Home Management House*)			3
H. E. 17, 18 (*Advanced Foods*)	2		2
H. E. 41 (*Institutional Management*)	3		
H. E. 43, 44 (*Institutional Practice*)	2		2
H. E. 19 (*Nutrition*)	2		
Acct. 1, 2 (*Elementary Accounting*)	4		4
Electives to meet semester requirements			
	16		16

EXTENSION TRAINING CURRICULUM

Agr. Econ. 8 (*Rural Community*)			3
H. E. (35) (*Home Management House*)			3
H. E.-Ed. 91 (*Problems in the Teaching of High School Home Economics*)	3		
H. E. (25) (*Child Development*)			3
H. E. 5, 6 (*Clothing Construction*)	2		2
H. E. 17, 18 (*Advanced Foods*)	2		2
Electives to meet semester requirements			
	16		16

UNIVERSITY OF NEW HAMPSHIRE

GENERAL BUSINESS CURRICULUM

Freshman Year

	First Semester Credits	*Second Semester Credits*
See Freshman Requirements, page 98		
Suggested Elective:		
Math. 31, 32 (*Mathematics*)	3	3
	16	16

Sophomore Year

Convocation (*Required*)		
Mil. Sci. 3, 4	1½	1½
Phys. Ed. 33, 34	½	½
*Eng. (*A second year of English*)	3	3
Acct. 1, 2 (*Accounting*)	4	4
Econ. 1, 2 (*Principles of Economics*)	3	3
Econ. 3 (*Economic and Commercial Geography*)	3	
Econ. 4 (*Economic and Commercial History*)		3
Electives to meet semester requirements		
	16	16

Junior Year

Convocation (*Required*)		
Acct. 3, 4 (*Accounting*)	3	3
Econ. 21, 22 (*Commercial Law*)	3	3
Econ. 23 (*Public Regulation*)	3	
Econ. 24 (*Marketing*)		3
Electives		
	16	16

Senior Year

Econ. 53 (*Money and Banking*)	3	
Econ. 51 (*Labor Problems*)	3	
Electives to meet semester requirements		
	16	16

* A second year of English must be taken before graduation.

COLLEGE OF LIBERAL ARTS

PRE-MEDICAL CURRICULUM*

	First Semester Credits	*Second Semester Credits*
See Freshman Requirements, page 98		
Suggested Electives:		
Chem. 1, 2 (*Inorganic Chemistry*)	4	4
Zoöl. 1, 2 (*Principles of Zoölogy*)	4	4
	16	16
Sophomore Year		
Convocation (*Required*)		
Mil. Sci. 3, 4	1½	1½
Phys. Ed. 33, 34	½	½
Eng. (*Second year of English*)	3	3
Zoöl. 15, 16 (*Comparative Anatomy of Vertebrates*)	3	3
Suggested elective:		
Lang. (*French or German*)	3	3
Chem. 25, 26 (*Quantitative and Qualitative*)	3	3
	16	16
Junior Year		
Convocation (*Required*)		
Phys. 17, 18 (*Pre-medical Physics*)	5	5
Chem. 53, 54 (*Organic Chemistry*)	5	5
Suggested electives:		
Advanced Chemistry	4	4
Economics	3	3
Advanced English	3	3
Foreign Language	3	3
History	3	3
Mathematics	4	4
Political Science	3	3
Psychology	3	3
Sociology	3	3
Advanced Zoölogy	4	4
	16	16
Senior Year		
Adv. Zoöl.	4	4
Suggested electives:		
Advanced Chemistry	4	4
Economics	3	3
Advanced English	3	3
Foreign Language	3	3
History	3	3
Mathematics	4	4
Political Science	3	3
Psychology	3	3
Sociology	3	3
Advanced Zoölogy	4	4
	16	16

* Students who wish to take the Pre-medical Curriculum must obtain the permission of the Committee on Pre-medical Instruction.

UNIVERSITY OF NEW HAMPSHIRE

*UNIVERSITY TEACHER TRAINING CURRICULUM

	First Semester Credits		Second Semester Credits
Freshman Year			
See Freshman Requirements, page 98			
Suggested elective:			
**Teaching major (*First year*)			
	16		16
§Sophomore Year			
Convocation (*Required*)			
Mil. Sci. 3, 4	1½		1½
Phys. Ed. 33, 34 (*For Men*)	½		½
Phys. Ed. 3, 4 (*For Women*)	1		1
Eng. (*Advanced English*)	3		3
Educ. 41, 42 (*Psychological Principles*)	3		3
Teaching major (*Second year*)	3		3
First teaching minor (*First year*)	3		3
Electives to meet semester requirements			
	16		16
Junior Year			
Convocation (*Required*)			
Phys. Ed. 5, 6 (*For Women*)	1		1
Educ. 51, 52 (*Social Principles*)	3		3
Educ. 61, (61) (*Principles and Problems*)	3	or	3
Teaching major (*Third year*)	3		3
First teaching minor (*Second year*)	3		3
Second teaching minor (*First year*)	3		3
Electives to meet semester requirements			
	16		16
Senior Year			
†Teaching major (*Fourth year*)	3		
‡First teaching minor (*Third year*)	3		
‡Second teaching minor (*Second year*)	3		3
Problems in teaching (*major*)	3		
Problems in teaching (*minor*)	3		
Supervised teaching			6–10
Electives to meet semester requirements			
	16		16

* The program of this curriculum may be completed by students majoring in any of the departments of the University offering work, the subject-matter of which is offered in the secondary school. A satisfactory completion of this curriculum will entitle the student to a certificate indicating the fact.

** See section covering Department of Education in later pages for description of teaching major and teaching minor subjects.

§ General Arts College students satisfactorily completing this curriculum are released from the sophomore group requirements of this general curriculum and are entitled to receive the degree given to students majoring in their respective subjects.

† Remainder of the total of 24 semester credits required for the satisfactory completion of the curriculum.

‡ Remainder of the total of 12 semester credits required in each teaching minor.

COLLEGE OF LIBERAL ARTS

SOCIAL SERVICE CURRICULUM

Freshman Year

	First Semester Credits	Second Semester Credits
See Freshman Requirements, page 98		
Suggested elective:		
Zoöl. 1, 2 (*Principles of Zoölogy*)	4	4
	16	16

Sophomore Year

Convocation (*Required*)		
Phys. Ed. 3, 4	1	1
Eng. (*A second year of English*)	3	3
Psych. 21, 22 (*Elementary*)	3	3
Zoöl. 3, 4 (*Hygiene and Sanitation*)	3	3
Soc. 1 (*Principles*)	3	
Soc. 2 (*Social Psychology*)		3
Electives to meet semester requirements		
	16	16

Junior Year

Convocation (*Required*)		
Phys. Ed. 5, 6	1	1
Soc. 61 (*Social Pathology*)	3	
Soc. 62 (*Community Organization*)		3
Soc. 71 (*Crime and Its Social Treatment*)	3	
Soc. 72 (*The Family*)		3
Soc. 76 (*Principles of Social Case Work*)		3
Suggested electives:		
Econ. 1, 2 (*Principles*)	3	3
Pol. Sci. 1, 2 (*Citizenship*)	3	3
8 weeks' summer social service field work with an approved agency. (*2 credits may be used for major credits*)		
	16	16

*Senior Year

Psych. 61 (*Abnormal*)	3	
Psych. 62 (*Mental Hygiene*)		3
Soc. 75 (*Methods of Social Research*)	3	
Soc. 83 (*Social Work Organization and Admin.*)	3	
Soc. 84 (*Methods of Social Progress*)		3
Suggested electives:		
Econ. 9 (*Labor Problems*)	3	
Zoöl. 29, 30 (*Cytology and Genetics*)	4	4
	16	16

* May be taken in a school of social work, see page 96.

UNIVERSITY OF NEW HAMPSHIRE

SECRETARIAL CURRICULUM

Freshman Year

	First Semester Credits	*Second Semester Credits*
See Freshman Requirements, page 98		
Suggested Elective:		
Lang. or Math. 31, 32	3	3
	16	16

Sophomore Year

Convocation (*Required*)		
Phys. Ed. 3, 4	1	1
Eng. (*A second year of English*)	3	3
Econ. 3, 4 (*Economic and Commercial Geography and History*)	3	3
Acct. 1, 2 (*Accounting*)	4	4
Suggested electives to meet semester requirements: Education, Language, Statistics, Sociology		
	16	16

Junior Year

Convocation (*Required*)		
Phys. Ed. 5, 6	1	1
Shorthand 1, 2	3	3
Typewriting 7, 8	2	2
Eng. (*A third year of English*)	3	3
Econ. 1, 2 (*Principles of Economics*)	3	3
Electives to meet semester requirements		
	16	16

Senior Year

Shorthand and Office Practice 3, 4	3	3
Typewriting 9, 10	2	2
Electives to meet semester requirements		
	16	16

Note: Students preparing to teach secretarial subjects must elect in addition a sufficient number of courses in Economics, Accounting and Education to meet State requirements.

COLLEGE OF TECHNOLOGY

GEORGE W. CASE, *Dean*

DEPARTMENTS

ARCHITECTURE	MATHEMATICS
CHEMISTRY	MECHANICAL ENGINEERING
CIVIL ENGINEERING	PHYSICS
ELECTRICAL ENGINEERING	ENGINEERING EXPERIMENT STATION

The College of Technology offers the following four-year curricula:

ARCHITECTURE CURRICULUM.—This curriculum is planned to prepare its graduates for immediate usefulness in the profession of architecture and, while it is highly technical, it does not overlook the need of the professional man for a broad cultural background.

The first three years aim to provide fundamental instruction and discipline in the art, science, theory, and history of architecture, supplemented with such basic courses of study in related departments of the University as shall give a proper background for independent work in architectural design and construction.

The fourth year is devoted chiefly to thesis work in the design of a civic or residential development in harmony with New England traditions, followed by complete working drawings and specifications covering all branches of the work and supplemented with studies of office procedure including contract forms, accounting and bookkeeping, the aim being to prepare the student for immediate service in an architect's office or in some branch of the building construction industry.

CHEMISTRY CURRICULUM.—This curriculum is intended to fit the student for the career of a professional chemist, and to give a good foundation for original and independent chemical research.

Instruction is imparted by lectures, recitations and a large amount of carefully supervised laboratory work. The laboratory study is largely individual, and the work of each student is conducted with reference not only to the particular subject he may have in view, but also to the acquirement of a broad knowledge of chemical science.

The student is given a training in either German or French to enable him to read with ease the chemical literature; a grounding in mathematics, necessary for advanced theoretical chemistry or chemical engineering; a somewhat limited amount of special work in both mechanical and electrical engineering and a thorough undergraduate training in theoretical and applied chemistry. He is encouraged to develop the power of solving chemical problems by independent thought through the aid of the reference library and chemical periodicals.

Civil Engineering Curriculum.—This curriculum is designed to give the student theoretical and practical training in the principles upon which the practice of civil engineering is based, and to allow him the opportunity to apply these principles to problems of professional practice in the classroom, in the design room and in the field.

Civil engineering, the oldest of the engineering professions, still covers a broad field of activity, including topographical, structural, transportation, hydraulic, and sanitary engineering. This curriculum places about equal emphasis upon each of these various branches and allows the student some opportunity to develop his special interests through the thesis requirement.

Electrical Engineering Curriculum.—The electrical engineering curriculum is intended to meet the demands of young men fitting themselves for professional engineering in connection with the various applications of electricity.

By means of lectures, recitations and laboratory work, the courses of the curriculum are brought to the attention of the student in such a manner as not only to emphasize the present needs of the practitioner and engineer, but to give him the principles needed to understand the constantly increasing number of new problems that require solution.

Mechanical Engineering Curriculum.—The mechanical engineering curriculum is intended to train young men for positions of responsibility in the field of the mechanical industries, and is designed to fit them socially for their proper places in the world. The courses in the curriculum are scientific, including mathematics, physics and chemistry, and technical, including drawing, shop work, thermodynamics, hydraulics, machine design, electrical engineering, power engineering. Two years of economics are available as alternates.

COLLEGE OF TECHNOLOGY

Instruction is given by means of recitations, lectures and laboratory work supplemented by illustrated lectures and assigned reading. Throughout the curriculum the theoretical work is supplemented by actual practice in mechanical operation and scientific research, by training in the use of tools for working wood and metals, and by experimental tests and demonstrations in the mechanical, electrical, chemical and physical laboratories.

Engineering Experiment Station.—The Engineering Experiment Station was established for the purpose of making available the advisory assistance of heads of departments and experienced men in the Faculty of the College of Technology, and the use of laboratory facilities of these departments for service and assistance of New Hampshire industries and the people of New Hampshire in solving their technical problems.

Alumni Representation.—An Advisory Committee of Alumni of the College of Technology, composed of men in direct contact with industry and practical professional affairs, serves to keep the Faculty in touch with developments in the several fields which attract our graduates. Members of this committee also serve as consultants when important changes in curricula, faculty personnel and policies of administration are considered. The members are:

Henry H. Calderwood, B.S. in E.E., '01, 16 Prospect Street, Saugus, Mass.
John T. Croghan, B.S. in M.E., '08, 574 Chestnut Street, Waban, Mass.
Robert A. Neal, B.S. in E.E., '10, 286 Burlington Road, Wilkinsburg, Pa.
Lester A. Pratt, Ph.D., '09, 13 Wildwood Street, Winchester, Mass.

ARCHITECTURE

Freshman Year

	First Semester Credits	Second Semester Credits
Convocation (*Required*)		
Freshman Assembly (*Required First Semester*)		
Phys. Ed. 31, 32	½	½
Mil. Sci. 9, 10	1½	1½
Math. 1, 2 (*Algebra and Trigonometry*)	4	4
Eng. 1, 2 (*Composition*)	3	3
*Chem. 1 (*Inorganic Chemistry*)	4	
*M. E. 1 (*Engineering Drawing*)	2	
*M. E. S1 (*Wood Shop*)	3	
Arch. 2 (*Elements of Design*)		2
Arch. 24 (*Elements of Architecture*)		2
Arch. 26 (*Shades and Shadows, Perspective*)		3
Arch 38 (*Freehand Drawing*)		2
	18	18

Sophomore Year

Convocation (*Required*)		
Phys. Ed. 33, 34	½	½
Mil. Sci. 11, 12	1½	1½
Arch. 5, 6 (*History of Architecture*)	2	4
Arch. 27, 28 (*Architectural Design*)	6	6
Arch, 39, 40 (*Freehand Drawing*)	2	2
Phys. 3, 4 (*Physics*)	4	4
†Eng. 35 (*Public Speaking*)	2½	
	18½	18

Junior Year

Convocation (*Required*)		
Arch. 9 (*Architectural Composition*)	2	
Arch. 14 (*Domestic Architecture*)		3
Arch. 29, 30 (*Architectural Design*)	6	6
Arch. 41, 42 (*Water Coloring and Modeling*)	3	3
M. E. 11, 12 (*Mechanics*)	3	3
M. E. 41 (*Heating and Ventilating*) or E. E. 31 (*Electricity*)	2	
†History 51, 52 (*Recent World History*)	3	3
	19	18

Senior Year

Arch. 15 (*Professional Practice*)	2	
Arch. 16 (*Specifications and Appraising*)		2
Arch. 19, 20 (*Building Construction*)	3	3
Arch. 21 (*Architectural Seminar*)	2	
Arch. 31, 32 (*Architectural Design and Thesis*)	6	6
Arch. 44 (*Model Making*)		2
†Eng (41) (*Expository Writing*)		2
Phil. 83 (*Ethics*)	3	
†Econ. 46 (*Legal Principles of Business Transactions*)		2
M. E. 41 (*Heating and Ventilating*) or E. E. 31 (*Electricity*)	2	
	18	17

* A course approved by the department head may be substituted for M. E. 1, M. E. S1, Chem. 1.

† A course approved by the department may be substituted only if a conflict exists.

RECOMMENDED ELECTIVES

		First Semester Credits		*Second Semester Credits*
C. E. 9 or (9)	Plane Surveying	2	or	2
Econ. 1, 2	Principles of Economics	3		3
Econ. 45	Business Organization and Finance	2		
Eng. 3, 4	Survey of English Literature	3		3
Eng. 29, 30	Survey of Art	3		3
Geol. 7, (7)	General Geology	3	or	3
Hist. 11	Ancient Orient	3		
Hist. 12	Greece			3
Hist. 13, 14	Roman	3		3
Hist. 15, 16	Medieval	3		3
Hist. 17, 18	Renaissance	3		3
Hist. 19, 20	Modern European	3		3
Modern Language	A year's work			
Music	A year's work			
Phil. 49	Introduction to Philosophy	3		
Phil. 84	Ethics			3
Pol. Sci. 3, 4	American Government	3		3
Soc. 1	Principles of Sociology	3		
Soc. 2	Social Psychology			3

TECHNOLOGY CURRICULUM IN CHEMISTRY

Freshman Year

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Freshman Assembly (*Required First Semester*)		
Phys. Ed. 31, 32	½	½
Mil. Sci. 9, 10	1½	1½
Eng. 1, 2 (*Composition*)	3	3
Math. 5, 6 (*First Year Mathematics*)	5	5
Chem. 1, 4 (*Inorganic Chemistry*)	4	6
M. E. 1 (*Engineering Drawing*)	2	
M. E. (*Shop Work*)	2	
Geol. (7) (*General Geology*)		3
	18	19

Sophomore Year

Convocation (*Required*)		
Phys. Ed. 33, 34	½	½
Mil. Sci. 11, 12	1½	1½
Chem. 21, 22 (*Analytical Chemistry*)	4	4
Math. 7, 8 (*Calculus*)	3	3
Phys. 7, 8 (*General Physics*)	4	4
Phys. 9, 10 (*Physics Laboratory*)	3	3
Ger. 1, 2 (*German*)	3	3
	19	19

Junior Year

Convocation (*Required*)		
Chem. 47, 48 (*Organic Chemistry*)	5	5
Chem. 31, 32 (*Quantitative Analysis*)	5	5
Chem. 61, 62 (*Special Topics in Inorganic Chemistry*)	2	2
E. E. 33 (*Electrical Engineering*)	4	
Phys. 52 (*Electrical Measurements*)		3
Approved Elective	3	3
	19	18

Senior Year

Chem. 83, 84 (*Physical Chemistry*)	5	5
Chem. 71, 72 (*Industrial Chemistry*)	3	3
Chem. 87, 88 (*Thesis, Bibliography and Seminar*)	7	7
Approved Elective	3	3
	18	18

COLLEGE OF TECHNOLOGY

CIVIL, ELECTRICAL AND MECHANICAL ENGINEERING

Freshman Year

	First Semester Credits	Second Semester Credits
Convocation (*Required*)		
Freshman Assembly (*Required First Semester*)		
Phys. Ed. 31, 32	½	½
Mil. Sci. 9, 10	1½	1½
Math. 5, 6 (*First Year Mathematics*)	5	5
Chem. 1, 2 (*General Chemistry*)	4	4
Eng. 1, 2 (*Composition*)	3	3
M. E. 1, 2 (*Engineering Drawing*)	2	2
M. E. S1, S2 (*Wood, Forge and Machine Work*)	3	3
	19	19

CIVIL ENGINEERING

Sophomore Year

Convocation (*Required*)		
Phys. Ed. 33, 34	½	½
Mil. Sci. 11, 12	1½	1½
C. E. 1, 2 (*Surveying*)	6	4
C. E. 4 (*Location Surveying and Earthwork*)		2
Math. 7, 8 (*Calculus*)	3	3
Phys. 7, 8(*Physics*)	4	4
Phys. 9, 10 (*Physics Laboratory*)	3	3
	18	18

Junior Year

Convocation (*Required*)		
C. E. 5, 6 (*Location Surveying and Mapping*)	1	1
C. E. 16 (*Engineering Materials*)		2
C. E. 22 (*Hydraulics*)		4
C. E. 27, 28 (*Theory of Structures*)	4	4
C. E. 41, 42 (*A.S.C.E.*) (*Required*)		
M. E. 9, 10 (*Applied Mechanics*)	3	4
E. E. 35 (*Electrical Machinery*)	4	
Geol. 7 (*General Geology*)	3	
Econ. 45 (*Business Organization and Finance*)		
Econ. 46 (*Public Regulation of Industry*)		
Econ. 47, 48 (*Economic History of the Working Classes*) or		
Mil. Sci. 13, 14 (*Coast Artillery*)	3	3
	18	18

Senior Year

C. E. 31 (*Highway Engineering and Transportation*)	4	
C. E. 32 (*Transportation Engineering*)		3
C. E. 33, 34 (*Hydraulic and Sanitary Engineering*)	4	4
C. E. 35 (*Structural Design*)	4	
C. E. 36 (*Reinforced Concrete Structures*)		4
C. E. 38 (*Thesis*)		2
C. E. 43, 44 (*A.S.C.E.*) (*Required*)		
M. E. 21, 22 (*Heat Power Engineering*)	2	2
Eng. 41 (*Expository Writing*)	2	
*Mil. Sci. 15, 16 (*Coast Artillery*)		
*M. E. 45, 46 (*Management*)	2	3
	18	18

* Students electing Mil. Sci. 15, 16 are not required to register for M. E. 45 and C. E. 32.

ELECTRICAL ENGINEERING

Sophomore Year

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Phys. Ed. 33, 34	½	½
Mil. Sci. 11, 12	1½	1½
Math. 7, 8 (*Calculus*)	3	3
Phys. 7, 8 (*General Physics*)	4	4
Phys. 9, 10 (*General Physics Laboratory*)	3	3
E. E. 1, 2 (*Electrical Engineering*)	2	2
M. E. 3 (*Machine Drawing*)	2	
M. E. 4 (*Kinematics*)		3
M. E. (S17) (*Machine Work*)		2
C. E. 9 (*Surveying*)	2	
	18	19

Junior Year

Convocation (*Required*)		
E. E. 3, 4 (*Electrical Engineering*)	3	3
E. E. 13, 14 (*Electrical Problems*)	2	2
E. E. 15, 16 (*A.I.E.E.*) (*Required*)		
E. E. 23, 24 (*Electrical Laboratory*)	2	2
M. E. 9, 10 (*Mechanics*)	3	4
M. E. 25, 26 (*Heat Power Engineering*)	3	4
M. E. 27 (*Mechanical Laboratory*)	2	
Econ. 45, 47 (*Business Organization and Econ. History*) and Econ. 46, 48 (*Public Regulation of Industry and Econ. History*), or		
Math. 51, 52 (*Differential Equations and Vector Analysis*) or Mil. Sci. 13, 14 (*Coast Artillery*)	3	3
	18	17

Senior Year

E. E. 5 (*Electrical Engineering*)	3	
*E. E. 7, 8 (*Electronics and Communication*)	3	5
*E. E. 10 (*Advanced Circuit Theory*)		4
E. E. 12 (*Illumination*)		2
E. E. 17, 18 (*A.I.E.E.*) (*Required*)		
*E. E. 25, 26 (*Electrical Laboratory*)	4	4
*E. E. 28 (*Advanced Electronics Laboratory*)		4
Phys. 51 (*Theory of Electrons*)	2	
Phys. 52 (*Electrical Measurements*)		3
C. E. 23 (*Hydraulics*)	2	
Eng. (41) (*Expository Writing*)		2
‡M. E. 45, 46 (*Management*)	2	3
Mil. Sci. 15, 16 (*Coast Artillery*)	3	3
Approved non-technical elective	3	3
	19	18

‡ Students electing Mil. Sci. 15 are not required to register for M. E. 45.
* E. E. 8, 10, 26 and 28 are elective courses.

COLLEGE OF TECHNOLOGY

MECHANICAL ENGINEERING

Sophomore Year

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Phys. Ed. 33, 34	½	½
Mil. Sci. 11, 12	1½	1½
Math. 7, 8 (*Calculus*)	3	3
Phys. 7, 8 (*General Physics*)	4	4
Phys. 9, 10 (*General Physics Laboratory*)	3	3
M. E. 3 (*Machine Drawing*)	2	
M. E. 4 (*Kinematics*)		3
M. E. 5, 6 (*Mechanical Laboratory*)	1	1
M. E. S17 (*Machine Work*)	2	
C. E. (9) (*Surveying*)		2
	17	18

Junior Year

Convocation (*Required*)		
A.S.M.E. 1, 2 (*Required*)		
E. E. 37, 38 (*Electrical Machinery*)	4	4
M. E. 7, 8 (*Mechanics*)	4	4
M. E. 23, 24 (*Thermodynamics*)	3	3
M. E. 29, 30 (*Mechanical Laboratory*)	2	1
M. E. 39 (*Heating and Ventilating*)	2	
C. E. 24 (*Hydraulics*)		3
Econ. 45, 47 (*Business Organization and Econ. History*) and Econ. 46, 48 (*Public Regulation of Industry and Economic History*), or		
Mil. Sci. 13, 14 (*Coast Artillery*)	3	3
	18	18

Senior Year

A.S.M.E. 3, 4 (*Required*)		
M. E. 13 (*Manufacture of Iron and Steel*)	3	
M. E. 15, 16 (*Machine Design*)	3	3
M. E. 32 (*Mechanical Laboratory*)		2
M. E. 33, 34 (*Power Plants*)	2	2
M. E. 35, 36 or 37, 38 (*Automotive Eng. or Aeronautics*)	3	3
M. E. 45, 46 (*Management*)	2	3
M. E. 50 (*Thesis*)		2
Eng. 41 (*Expository Writing*)	2	
Mil. Sci. 15, 16 (*Coast Artillery*) or Approved elective	3	3
	18	18

UNIVERSITY OF NEW HAMPSHIRE

SUMMER SCHOOL

The University of New Hampshire Summer School (the fourteenth session of which will be held from June 28 to August 6, 1937) offers courses in most departments of all three colleges. The Summer School is designed to meet the needs of:

1. Teachers, superintendents and supervisors of secondary schools.

2. Students in the University of New Hampshire and in other colleges who desire to utilize the vacation period for the purpose of anticipating courses or supplying deficiencies.

3. Graduate students who may earn the degree of Master of Arts, Master of Science or Master of Education for work done exclusively during summer sessions.

4. Candidates for admission to any of the colleges of the University who desire to obtain advanced standing or to complete some special requirement for admission.

For Summer School Bulletin, information as to particular courses, etc., address the Director of the Summer School, University of New Hampshire, Durham, N. H.

EXTENSION COURSES FOR UNIVERSITY CREDIT

In response to the insistent demand of the teachers of the state the Trustees of the University have approved offering extension courses for university credit. Professors are sent out to centers within the state where there is a demand for classes to be formed. At present the courses offered will depend on the teaching schedules of the various departments.

DESCRIPTION OF COURSES

(Alphabetically Arranged)

The title of the course is given in capital letters and small capital letters. The numeral designates the particular course. Odd numerals indicate courses offered in the first semester. Even numerals indicate courses offered in the second semester. Numerals enclosed in parenthesis indicate that a course is repeated in the semester following. Thus, course 1, (1) is offered in the first semester and is repeated in the second semester.

Courses numbered 1–50 are open to undergraduates only. Courses numbered 51–100 are open to undergraduates and graduate students. Courses numbered 101–200 are for graduate students only. Courses numbered above 200 are open only to students in the Two Year Curriculum in Agriculture.

Following the title of each course is the description of the work given and the name of the instructor.

The next paragraph gives the following information in the order indicated: (1) prerequisites, if any; (2) the curricula in which the course is required and the undergraduate year in which it should be taken; (3) the number of hours of recitations or laboratory periods required each week; (4) the number of semester credits the course will count in the total required for graduation. Lectures and recitations are fifty minutes in length. Laboratory periods are two and one-half hours in length.

All courses (unless otherwise marked) are open to students who have passed the prerequisites.

An elective course will be given only when there is a minimum of five students registered therefor.

ACCOUNTING

(See Economics)

AGRICULTURAL AND BIOLOGICAL CHEMISTRY

THOMAS G. PHILLIPS, *Professor*
STANLEY R. SHIMER, *Assistant Professor*
HENRY A. DAVIS, *Assistant*
C. KENNETH SHUMAN, *Assistant*

1. AGRICULTURAL CHEMISTRY. An introduction to organic chemistry and a brief survey of biological chemistry. Professor Phillips, Assistant Professor Shimer, and Mr. Shuman.

Prerequisite: Chemistry 2. Required of Sophomores in Agriculture. 3 lectures; 2 laboratories; 5 semester credits.

2. AGRICULTURAL CHEMISTRY. The chemistry of plant growth, soils and fertilizers. Professor Phillips and Mr. Davis.

Prerequisite: Agricultural Chemistry 1 or its equivalent. Elective. 2 lectures; 1 laboratory; 3 semester credits.

4. Agricultural Chemistry. The chemistry of animal nutrition. Assistant Professor Shimer and Mr. Davis.

Prerequisite: Agricultural Chemistry 1 or its equivalent. Elective. 2 lectures; 1 laboratory; 3 semester credits.

5. Organic and Biological Chemistry. An introduction to organic chemistry and a brief survey of biological chemistry. Assistant Professor Shimer and Mr. Davis.

Prerequisite: Chemistry 2. Required of Juniors in Home Economics. 3 lectures; 2 laboratories; 5 semester credits.

6. Chemistry of Food and Nutrition. The chemistry of food materials and of digestion, absorption, metabolism and excretion. Assistant Professor Shimer and Mr. Shuman.

Prerequisite: Agricultural Chemistry 5 or its equivalent. Elective for Home Economics students. 2 lectures; 1 laboratory; 3 semester credits. (Formerly 24–b)

51, 52. Physiological Chemistry. The chemistry of fats, carbohydrates and proteins, colloids, enzyme action, digestion, metabolism and excretion. The qualitative and quantitative examination of blood and urine. Assistant Professor Shimer.

Prerequisite: Satisfactory preparation in Organic Chemistry and Quantitative Analysis. 3 lectures; 2 laboratories; 5 semester credits.

53, 54. Agricultural Analysis. A study of the methods of analysis of soils, fertilizers, feeding stuffs, and other products important in agriculture. Professor Phillips and Assistant Professor Shimer.

Prerequisite: Satisfactory preparation in Organic Chemistry and Quantitative Analysis. 1 lecture; 3 laboratories; 4 semester credits.

55. Plant Chemistry. A study of the chemistry of plant growth and of methods for the analysis of plant materials. Professor Phillips.

Prerequisite: Agricultural Chemistry 2. 2 lectures; 2 laboratories; 4 semester credits.

For courses primarily for graduate students, see Catalog of the Graduate School.

AGRICULTURAL ECONOMICS

M. Gale Eastman, *Professor*
Harold C. Grinnell, *Assistant Professor*
Perley F. Ayer, *Instructor*

1. Rural Economics. History and economy in the development of rural living, with special emphasis on the relation of current public problems to the agricultural industry. Assistant Professor Grinnell.

Required of Juniors in certain curricula. 2 lectures; 2 semester credits.

3. Farm Accounting. A practical course in accounting methods as applied to the farm business. Inventories, records of receipts and expenses, farm cost accounts, and the interpretation of the summaries of these accounts will be emphasized. Assistant Professor Grinnell.

Required of Juniors in Animal Husbandry, General Agriculture and Teacher Training. 1 laboratory; 2 semester credits.

4. Farm Management. Deals with the organization of the farm business from the point of view of efficiency and greatest continuous profit. Types of farming, factors affecting financial success, measures of financial success, cropping systems, livestock problems, labor problems, etc. Practical problems in analyzing typical farm businesses and in the reorganization of at least one nearby farm. Assistant Professor Grinnell.

Required of Seniors in Agriculture, except those registered in Agricultural Chemistry, Botany, Entomology, Forestry and Poultry. 2 lectures; 1 laboratory; 3 semester credits.

5. Cooperative Marketing. The essential characteristics of cooperative development in this country, something of its present importance, and the principles underlying sound organization. Types of cooperatives, legal phases and problems in corporation finance are emphasized. Assistant Professor Grinnell.

Required of Seniors in Agriculture, except those registered in Agricultural Chemistry, Botany, Entomology, Forestry and Poultry. Elective for other students. 2 lectures; 2 semester credits.

7. Agricultural Statistics. An elementary course to acquaint the agricultural student with some every-day problems of chance in biological phenomena and to give him some immunity against snap judgments, and some basis for the interpretation of current research information. Professor Eastman.

Elective for Seniors in Agriculture. 1 laboratory; 1 semester credit.

8. The Rural Community. A consideration of farming as a mode of life; the attitudes, problems and satisfactions of rural people; social institutions and human-relationship organizations, including Agricultural Extension. Lectures, reference work, and actual laboratory demonstrations will be provided. The State Extension Staff will cooperate. Professor Eastman and Mr. Ayer.

Required of Home Economics Extension and Agricultural Teacher-Training Seniors. Elective for other Agricultural Seniors. 2 lectures; 1 laboratory; 3 semester credits.

51, 52. Special Agricultural Economics. Graduate or undergraduate credit to satisfy a student's needs may be obtained in this course in special cases by permission of the head of the department. Professor Eastman and Assistant Professor Grinnell.

Hours of meeting and number of credits to be arranged.

AGRONOMY AND AGRICULTURAL ENGINEERING

Ford S. Prince, *Professor*

Leroy J. Higgins, *Assistant Professor*

George M. Foulkrod, *Assistant Professor*

Agronomy

1. Soils. A study of the nature and properties of soils, giving special consideration to the fundamental physical, chemical and bio-

logical processes and characteristics of productive soils. The subject-matter will be of an introductory nature to serve all students in the College of Agriculture and will be fundamental for those who continue in agronomy work. Laboratory work will put into application some of the more important principles considered in class. Assistant Professor Higgins.

Required of Juniors in Agriculture, with a few exceptions. 2 lectures; 1 laboratory; 3 semester credits.

2. Fertilizers. A study of the occurrence and function of plant food materials in soils and the use of manure and fertilizers in crop production. Special attention will be given to the production, care and preservation of manure, to the compounding of fertilizers, and the response of different types of crops to the several materials now used to stimulate crop production. Professor Prince.

Prerequisite: Agricultural Chemistry 1. Required of Juniors in Agriculture, with a few exceptions. 2 lectures; 2 semester credits.

3, 4. Crop Production. First semester comprises an introduction to the study of crops in general, considering distribution, choice, growth processes, cropping practices, preparation of seed beds, care, improvement and breeding. In the latter part of the semester root-crops and potatoes will be considered in detail. Second semester continues in more detail concerning forage, cereals, and other crops grown in New England. Laboratory work consists of practice in identification and judging. Hayland and pasture management will be emphasized. Assistant Professor Higgins.

Prerequisite: Agronomy 3. Required of Juniors in Agriculture, with a few exceptions. 2 lectures; 1 laboratory; 3 semester credits.

5. Soil Utilization. A study of the classification, utilization and management of soils, particularly those of New Hampshire. Available literature will be cited. Laboratory will consist of practical soil management and utilization problems, field trips and mapping. Assistant Professor Higgins.

Prerequisite: Agronomy 1. Elective for Seniors. 1 lecture; 1 laboratory; 2 semester credits.

6. Seed Testing. A study of the official method of analyzing agricultural seeds for purity and germination, involving studies in the identification of seeds, as well as the technique of using equipment in weighing, germinating, counting, estimating, etc., for official reports. Assistant Professor Higgins.

Prerequisite: Botany 2 and Agronomy 4. Elective for a very limited number of Seniors. Hours arranged. 1 laboratory; 1 semester credit.

7, 8. Agronomic Literature. A special study of literature relating to soils and crops. Designed to meet the needs of students interested in some phase of agronomy. Practice in looking up literature and in the preparation of reports and abstracts will be given. Professor Prince.

Prerequisites: Agronomy 1, 2; 3, 4. Elective for Seniors. Number of credits to be arranged.

Agricultural Engineering

1. Basic Agricultural Engineering Applications. The entire field of agricultural engineering is covered in such a manner that the student will be familiar with the methods most commonly employed in solving every-day farm problems. Farm mechanics; farm mapping; farm water supply and sanitation; farm machinery and power applications; farm drawing and sketching; and types and purposes of farm buildings are covered in theory and demonstration. Assistant Professor Foulkrod.

Elective for all Agricultural Freshmen and Sophomores. 2 lectures; 1 laboratory; 3 semester credits.

2. Farm Power and Machinery. A study of the development of the farm tractor and its special tools, together with a complete review of the development of the machines at present available to the farmer, with special emphasis on those of economic importance in this section. Care, repair and adjustment will be carefully considered in the laboratory, supplemented by operation under actual field conditions. Assistant Professor Foulkrod.

Prerequisite: Agricultural Engineering 1. Recommended for Seniors in General Agriculture, Animal Husbandry, Dairy Husbandry, and Poultry Husbandry. Elective for all other Agricultural Juniors and Seniors. 1 lecture; 1 laboratory; 2 semester credits.

3. Electric Farm Power. A course embracing the comparative utility of individual plant and central station current; rural line extension procedure; proper wiring for farm applications with particular emphasis on household, farmstead, dairying, poultry farm and horticultural uses. Special attention will be given the economics of various methods, cost of operation, care and maintenance of equipment, quality of results obtainable and effect on farm labor problem. Assistant Professor Foulkrod.

Recommended for Seniors in Animal Husbandry, Dairy Husbandry, and Horticulture and Juniors in Poultry Husbandry. Elective for all other Agricultural Juniors and Seniors. 2 recitations; 1 laboratory; 3 semester credits.

4. Agricultural Drawing. This course is designed to meet the needs of all agricultural students, and includes beside the elementary principles of drawing and lettering the application of these principles to the making of charts, graphs, maps, machines and shop sketches, as well as to plans for minor farm buildings. Assistant Professor Foulkrod.

Recommended for all Sophomores in Agriculture. 1 laboratory; 1 semester credit.

5. Farm Buildings and Equipment. The lectures on types and purposes of farm shelters, materials, equipment and sanitary requirements will be paralleled by drafting room work in design and laboratory work in construction, with special attention to remodeling existing buildings. Assistant Professor Foulkrod.

Prerequisite: Agricultural Engineering 4. Elective for all Juniors and Seniors in Agriculture. 1 lecture; 1 laboratory; 2 semester credits.

6. Farm Mechanics Shop. Planned to give the Teacher Training Senior the greatest amount of practice in farm mechanics in the shortest possible time; to develop his skill with tools, and his general knowledge of farm mechanics applications. Assistant Professor Foulkrod.

Required of Agricultural Teacher Training Seniors. 2 laboratories; 2 semester credits.

UNIVERSITY OF NEW HAMPSHIRE

ANIMAL HUSBANDRY

LORING V. TIRRELL, *Professor*
CARL L. MARTIN, *Assistant Professor*

1. TYPES AND BREEDS OF LIVESTOCK. A study of the different breeds of horses, cattle, sheep, and swine in respect to their origin, history, development, characteristics, and adaptability to different conditions of climate and soil. One afternoon each week is devoted to judging the different breeds. Professor Tirrell.

Recommended for Freshmen in Agriculture. 2 lectures; 1 laboratory; 3 semester credits.

2. LIVESTOCK JUDGING. The work consists of a study of the principles and practice of judging horses, beef cattle, sheep and swine, and of the market classes and grades of horses and meat animals. The judging teams which represent the University at such expositions as the Eastern States at Springfield and the International at Chicago are selected from students taking courses 2 and 4. For a part of the laboratory work, trips are taken to some of the best breeding establishments in New England. Professor Tirrell.

Prerequisite: Animal Husbandry 1. Required of Sophomores electing Animal Husbandry. 1 laboratory; 1 semester credit.

3. FEEDS AND FEEDING. A study of the character, composition and digestibility of feedstuffs, and the methods of feeding different kinds of farm animals. Numerous samples of grains and by-products are used for the purpose of familiarizing the students with the different feedstuffs. Practice is given in calculating rations for various purposes. Professor Tirrell.

Required of Seniors in Animal Husbandry, Dairy Husbandry, General and Teacher-Training curricula. 3 lectures; 3 semester credits.

4. ADVANCED LIVESTOCK JUDGING. This is a continuation of 2 and is open to students who have previously taken 2. Professor Tirrell.

1 laboratory; 1 credit.

5, 6. VETERINARY SCIENCE. First semester comprises systematic anatomy of the different farm animals, animal physiology, and the

prevention of animal diseases. This course is especially designed for the agricultural student to acquaint him with the anatomical structures of the domestic animals, the functions of the organs of the body, and preventive veterinary medicine. The second semester is devoted to a study of the more common diseases of farm animals, their prevention, and control. Assistant Professor Martin.

Required of Juniors in Animal Husbandry. Elective for others. 3 lectures; 3 semester credits.

7. Animal Breeding. A study of the principles and practices of breeding farm animals, including cross-breeding, in-breeding, selection, inheritance, breed analysis, reproductive efficiency, fertility, sterility, Mendelism in relation to farm animals, acquired characters and variation. Practice is given in tracing and studying pedigrees. Professor Tirrell.

Required of Seniors in Animal Husbandry. 2 lectures; 1 laboratory; 3 semester credits.

8. Meat and Its Products; Livestock Markets. A study of meat, farm slaughter, curing and identification of cuts; livestock markets, stockyards and transportation. Occasional trips will be taken to slaughter houses and packing plants. Professor Tirrell.

Required of Seniors in Animal Husbandry. Elective for others. 2 lectures; 2 semester credits.

9. Management of Horses and Beef Cattle. Lectures and recitations upon the care of brood mares and cows, management of stallions and bulls, the breaking and training of colts, preparation of animals for the show ring, the management of pure-bred beef herds, and the feeding and handling of steers. Professor Tirrell.

Required of Seniors in Animal Husbandry. Elective for others. 2 lectures; 1 laboratory; 3 semester credits.

10. Sheep and Swine Husbandry. A consideration of the judging, breeding, feeding, management and preparation for the show ring of sheep and swine, with special reference to New Hampshire conditions. Professor Tirrell.

Required of Seniors in Animal Husbandry. Elective for others. 2 lectures; 1 laboratory; 3 semester credits.

12. Animal Husbandry Seminar. Library and reference work and the preparation of papers on various animal husbandry subjects of timely importance. Professor Tirrell.

Prerequisites: Animal Husbandry 3 and 7. Required of Seniors in Animal Husbandry. Elective for others. 1 lecture; 1 semester credit.

ARCHITECTURE

Eric T. Huddleston, *Professor*
Arnold Perreton, *Assistant Professor*
George R. Thomas, *Assistant Professor*

2. Elements of Design. A lecture course introductory to the principles of architectural design, discussing modern building materials, the function and form of modern architectural elements such as walls, columns, roofs, doors, windows, interiors, moldings and ornament, etc., followed by a synthesis of their application and relation to architectural design. Assistant Professor Perreton.

Elective by permission. Required of Freshmen in Architecture. 2 recitations; 2 semester credits.

5, 6. History of Architecture. Lectures with assigned reading and sketches on the historical development of the different periods of architecture and an analysis of the chief contributions each period made toward a constructive and artistic advance in architectural expression. Assistant Professor Perreton.

Elective by permission. Required of Sophomores in Architecture. First semester: 2 recitations; 2 semester credits. Second semester: 3 recitations; reports; 4 semester credits.

9. Architectural Composition. Lectures on the analysis of the principles governing architectural design and methods of applying these principles to the current design course to achieve an architectural expression which reveals the intrinsic qualities that are present in every type of modern building. Assistant Professor Perreton.

Required of Juniors in Architecture. 2 recitations; 2 semester credits.

14. Domestic Architecture. Lectures and recitations devoted to a brief study of the history of domestic architecture with special emphasis placed on early American housing as a basis for an appreciation of the New England Colonial architecture. Further study is given to modern housing problems, including the relation of the house plan to the individual site, to the garden, to accessory buildings, and to the community, with special consideration given to economy in design and material and the need for intelligent cooperation on the part of the prospective owner with the architect and builder. Professor Huddleston.

Required of Juniors in Architecture. 2 recitations; 1 laboratory; 3 semester credits.

15. Professional Practice. Discussions and assigned reading covering the personal, ethical, business, and legal relations of the architect with clients, contractors, craftsmen, etc., and the relations that should exist between the architect and the community in which he lives; followed by studies of office procedure in the conduct of an architect's office, i.e., contract forms, bookkeeping, and accounting as they apply to his professional work. Professor Huddleston.

Required of Seniors in Architecture. 2 recitations; 2 semester credits.

16. Specifications and Appraising. A study of the fundamentals of specification writing and the preparation of an outline specification adapted to the requirements of the thesis problem designed by each student. Methods of estimating and appraising buildings, both before and after construction, will be studied. Professor Huddleston.

Required of Seniors in Architecture. 2 recitations; 2 semester credits.

19, 20. Building Construction. The principles of structural design and an analysis of structural systems as applied to wood frame house construction, light and heavy timber construction, steel and reinforced concrete construction.

While emphasis is placed upon the principles involved in the selection of structural systems in the solution of various types of building construction problems, detailed study is made of the practical methods

used in applying the various materials of construction as they occur in modern practice: excavations; foundations; plain and reinforced concrete; waterproofing; wood frame and heavy timber construction; floor, wall, and partition construction in wood, masonry, and steel; brickwork and stone; roofing and sheet metal; millwork, stairs, plastering, etc.; and the introduction of the mechanical equipment for plumbing, heating, ventilating, and electrical systems. Professor Huddleston.

Prerequisite: Architecture 30 and Mechanical Engineering 12. Required of Seniors in Architecture. 3 laboratories; 3 semester credits.

21. Architectural Seminar. Library research and the preparation of papers on approved subjects related to the thesis problems. Each student is required to present and lead the discussion on his subject. Professor Huddleston.

Required of Seniors in Architecture. 2 recitations; 2 semester credits.

24. Elements of Architecture. Drafting room exercises, progressing in parallel with the lectures on Elements of Design (Architecture 2). Instruction in the accepted methods of architectural drafting. Assistant Professor Thomas.

Architecture 2 must be taken either in parallel or as a prerequisite. Elective by permission. Required of Freshmen in Architecture. 2 laboratories; 2 semester credits.

26. Shades, Shadows and Perspective. Determination of conventional shades and shadows as they occur in architectural drawings; problems illustrating the architectural application of descriptive geometry; theory of perspective and practical construction of perspective drawings. Rendering in wash of problems illustrating light, shade, and shadow. Assistant Professor Thomas.

Elective by permission. Required of Freshmen in Architecture. 1 lecture; 2 laboratories; 3 semester credits.

27, 28. Sophomore Architectural Design. A progressive series of competitive problems in the composition of architectural elements in exterior and interior design, with special emphasis given to the use of modern materials, and archeology, the subjects for which will be drawn from the parallel course in the History of Architecture (Architecture 5, 6). Assistant Professors Perreton and Thomas.

Prerequisite: Architecture 24 and 26. Required of Sophomores in Architecture. 6 laboratories; 6 semester credits.

29, 30. Junior Architectural Design. A progressive series of competitive problems in the application of the elements of architecture and the principles of architectural design to the design of modern buildings, taking into consideration the functional planning, characteristic composition, and decorative expression of residential, recreational, commercial, and municipal buildings of contemporary town and small city scale. Assistant Professor Perreton.

Prerequisite: Architecture 28. Required of Juniors in Architecture. 6 laboratories; 6 semester credits.

31, 32. Senior Architectural Design and Thesis. A practical course of building design to conform to the specified requirements such as are found in the architect's practice. The design and thesis includes a civic or residential development. From this will be taken a residence and public building, designed to conform to the specified requirements of hypothetical clients. This is followed by complete working drawings and details, including structural and equipment drawings to conform to the current architectural practice. Professor Huddleston and Assistant Professor Perreton.

Prerequisite: Architecture 30. Required of Seniors in Architecture. 6 laboratories; 6 semester credits.

33, 34. Advanced Architectural Design. Either Class "A" Project problems issued by the Beaux Arts Institute of Design or an approved program proposed by the student will be used for advanced study in architectural design. Assistant Professor Perreton.

Prerequisite: Architecture 30. Elective by permission only. Credits to be arranged.

37. Freehand Drawing. Studio exercises in graphical representations designed to stimulate and develop the student's expression of creative thoughts. Original ideas will be guided through the process of development by criticism and suggestions only, the student being given perfect freedom for self-expression. Assistant Professor Thomas.

Elective by permission. 2 laboratories; 2 semester credits.

38. Freehand Drawing. Elementary drawing in charcoal from casts and architectural ornament, aiming at the stimulation and devel-

opment of creative thought through the study of fundamental forms. Assistant Professor Thomas.

Elective by permission. Required of Freshmen in Architecture. 2 laboratories; 2 semester credits.

39, 40. Freehand Drawing. Studio exercises from architectural details, cast ornament, and the cast figure in various media, with attention to accurate reproduction of proportions, the principles of freehand perspective, and the expression of mass by means of line and simple light and shade. Weather permitting, sketching from nature with special emphasis on tree and shrubbery forms. Assistant Professor Thomas.

Prerequisite: Architecture 38. Elective by permission. Required of Sophomores in Architecture. 2 laboratories; 2 semester credits.

41, 42. Water Coloring and Modeling. Exercises in the handling of wash; studies in water color from documents, photographs, and still life; supplemented with lectures presenting the theory of color, both scientific and aesthetic. Outdoor sketching, if weather permits. Exercises in modeling clay of historic architectural ornament, followed by original designs from programs. Assistant Professor Thomas.

Prerequisite: Architecture 40. Elective by permission. Required of Juniors in Architecture. 1 lecture; 2 laboratories; 3 semester credits.

44. Model Making. To create further appreciation of three-dimensional design, a complete model of the senior thesis problem will be constructed. The model will be executed in the scale and manner of the type often presented by the architect to the prospective client in assisting him to interpret the various plans and elevations. Instruction in the construction of the various types of architectural models. Assistant Professor Thomas.

Prerequisite: Architecture 42. Required of Seniors in Architecture. 2 laboratories; 2 semester credits.

45, 46. Advanced Freehand Drawing. A general advanced study of special types, depending upon the student's previous training. The

student will do a variety of work in the studio under individual supervision and criticism. Assistant Professor Thomas.

Special permission must be obtained from the head of the department before registering in this course. Hours and credits to be arranged.

BOTANY AND BACTERIOLOGY

ORMOND R. BUTLER, *Professor*
MARIAN E. MILLS, *Assistant Professor*
STUART DUNN, *Instructor*
LAWRENCE W. SLANETZ, *Instructor*
ALBION R. HODGDON, *Instructor*
JOSEPH NAGHSKI, *Assistant*

BOTANY

1, 2. GENERAL BOTANY. A study of the seed-bearing plants with especial emphasis on the structure and functions of organs, followed by a general survey of the plant kingdom with especial emphasis upon development, reproduction and relationships. Evolution and heredity in plants. Assistant Professor Mills and Mr. Hodgdon.

Prerequisite: Botany 1. Required of Freshmen in Agriculture. Elective for others. 2 lectures; 2 laboratories; 4 semester credits.

3. PLANT HISTOLOGY. Characterization and differentiation of plant tissues; micro-technique. Mr. Dunn.

Prerequisite: Botany 2. Required of Juniors in Botany and certain Forestry students. 2 laboratories; 2 semester credits.

4. PLANT PHYSIOLOGY. Structure and properties of the cell; absorption and movement of water; metabolism; growth and irritability. Mr. Dunn.

Prerequisites: Botany 2 and one year of Chemistry. Required of Juniors in Botany and Forestry, and of Seniors in Horticulture. Elective for others. 2 lectures; 2 laboratories; 4 semester credits.

5. Plant Pathology. The bacterial and fungous diseases of plants, their symptoms, cause and prevention. Mr. Dunn.

Prerequisite: Botany 2. Required of Juniors or Seniors in Botany and Horticulture. Elective for others. 1 lecture; 2 laboratories; 3 semester credits.

52. Systematic Botany. A study of the higher plants of our native flora. The student is required to collect an herbarium of 60 specimens. Assistant Professor Mills and Mr. Hodgdon.

Prerequisite: Botany 1. Required of Seniors in Botany and certain Juniors in Forestry. Occasional lectures; laboratory work; field trips; 2 semester credits.

53, 54. Advanced Botany. The subject-matter will depend upon the training and desire of the student. It cannot be elected without previous consultation. Professor Butler, Assistant Professor Mills, and Mr. Dunn.

Credits to be arranged.

Bacteriology

1. General Bacteriology. Morphology, physiology and classification of bacteria. The bacteriology of water, sewage, milk and foods. Relationships of bacteria to agriculture, home economics, and the arts and industries. Mr. Slanetz and Mr. Naghski.

Prerequisite: One year of Inorganic Chemistry and Agricultural Chemistry 1 or its equivalent. Required of Home Economics Juniors and required of or elective for Juniors in various Agricultural curricula. Elective for others. 2 lectures; 2 laboratories; 4 semester credits.

2. Applied Bacteriology. A study of infection and immunity; important pathogenic bacteria; bacteriological and serological methods of disease diagnosis; bacteriological analysis of water, milk, meat, and canned products; antiseptics and disinfectants. Mr. Slanetz and Mr. Naghski.

Prerequisite: Bacteriology 1. 2 lectures; 2 laboratories; 4 semester credits.

51, 52. Advanced Bacteriology. The subject-matter will depend upon the training and desire of the student. It cannot be elected without previous consultation. Mr. Slanetz.

Credits to be arranged.

CHEMISTRY

Harold A. Iddles, *Professor*
Melvin M. Smith, *Associate Professor*
Heman C. Fogg, *Associate Professor*
James A. Funkhouser, *Assistant Professor*
Richard H. Kimball, *Assistant Professor*
Charles M. Mason, *Assistant Professor*
Albert F. Daggett, *Instructor*
Kendrick S. French, *Instructor*
Donald C. Gregg, *Assistant*
Warren F. Peckham, *Assistant*
Wilbur H. Miller, *Assistant*
James W. Clapp, *Assistant*
Herbert B. Cowden, *Assistant*

Breakage. A breakage deposit is required in certain laboratory courses, from which the actual breakage is deducted. The deposit receipt must be presented to the instructor at the first class meeting.

1, 2. General Chemistry. The course covers the fundamental laws and conceptions of chemistry, and includes a study of the non-metals and metals, together with their compounds. The theoretical principles are illustrated and explained by many lecture demonstrations, and the applications of chemistry in the professions are explained. Associate Professor Smith, Assistant Professor Funkhouser, Assistant Professor Kimball, Mr. Daggett, Mr. French, and assistants.

Elective for Liberal Arts students. Required of Freshmen in the College of Technology, Freshmen in Agriculture, and Sophomores in Home Economics. The class will be sectioned for those entering with credit and without credit in high school chemistry. 2 lectures; 1 recitation; 1 laboratory; 4 semester credits.

4. Inorganic Chemistry. This course is a continuation of Chemistry 1 and covers the fundamental laws and conceptions of chemistry involved in a study of the non-metals and metals, together with their compounds. Facts and practical applications are given and the principles are explained and illustrated by demonstrations in the lectures. The course is designed for major students in chemistry. Professor Iddles, Associate Professor Smith and assistants.

Required of Freshmen Majors in Chemistry. 2 lectures; 1 recitation; 3 laboratories; 6 semester credits.

21, 22. Introductory Analytical Chemistry. The first semester is devoted to the study of qualitative analysis. The lectures present a discussion of the reactions and theories of solutions involved in the qualitative scheme of analysis. Problem work dealing with hydrogen ion concentration and solubility product is included. In the laboratory, a study is made of the technique necessary for the separation and identification of the more common metallic and acidic constituents. The second semester covers theory, problems and laboratory technique necessary in gravimetric analysis and acidimetry and is designed for those who expect to continue with Chemistry 31, 32. Associate Professor Fogg and Mr. Daggett.

Prerequisite: Chemistry 2 or 4. Required of Sophomores in Chemistry; elective for others. 2 lectures; 2 laboratories; 4 semester credits. Deposit: Ten dollars for the year.

25, 26. Introductory Quantitative and Qualitative Analysis. The first semester covers the theory, problems and manipulation involved in some of the common procedures in quantitative analysis and includes work in both gravimetric and volumetric methods. More stress is placed on volumetric work than in course 21, 22 and includes acidimetry, the determination of pH, oxidation-reduction processes, etc. The work is designed particularly to meet the needs of pre-professional students and prospective teachers of chemistry in secondary schools. The work of the second semester deals with qualitative analysis. The course seeks to acquaint the student with the theory, problems and laboratory technique necessary for the separation and identification of the more common metallic and acidic constituents. Associate Professor Fogg and Mr. Daggett.

Prerequisite: Chemistry 2. Elective for Pre-medical Sophomores; elective for others to the limit of laboratory space. 1 lecture; 2 laboratories; 3 semester credits. Deposit: Ten dollars for the year.

31, 32. Quantitative Analysis. This is a continuation of Chemistry 21, 22 and covers the theory, problems and methods involved in the determination of pH, precipitation reactions, oxidimetry, electro-

analysis, and colorimetry. The major portion of the second semester is devoted to a study of methods and apparatus used in the industrial field for the technical analysis of gas, fuel and oil. Throughout the course, an attempt is made to present modern trends and newer procedures in quantitative analysis. Associate Professor Fogg.

Prerequisite: Chemistry 22. Required of Juniors in Chemistry; elective for others. 2 lectures; 3 laboratories; 5 semester credits. Deposit: Ten dollars for the year.

47, 48. Organic Chemistry. The lectures deal with the principal classes of organic compounds, aliphatic and aromatic, with emphasis upon class reactions and structural theory. In the laboratory, the preparation and purification of a selected number of organic compounds is carried on. The latter part of the laboratory work involves the use of group reactions for the identification of organic substances in a systematic scheme of qualitative organic analysis. Professor Iddles.

Prerequisite: Chemistry 22. Required of Juniors in Chemistry; not an elective course. 3 lectures; 2 laboratories; 5 semester credits. Deposit: Ten dollars for the year.

53, 54. Organic Chemistry. The lectures consider the chief divisions of organic chemistry, aliphatic and aromatic. These are considered with the needs of the pre-professional student in mind and are followed by a more detailed consideration of carbohydrates and proteins. The laboratory course is designed to develop the technique of organic chemical methods as illustrated in the preparation and purification of typical organic compounds. Assistant Professor Funkhouser.

Prerequisite: Chemistry 1, 2 and Chemistry 26 when possible. Elective for Liberal Arts students. Required of Junior Pre-medical students. 3 lectures; 2 laboratories; 5 semester credits. Deposit: Ten dollars for the year.

55, 56. Theoretical Problems of Modern Organic Chemistry. A consideration of the principles underlying the behavior of organic compounds, and the problems awaiting solution. The first semester includes such topics as free radicals, the nature of organic linkages, unsaturated compounds including conjugated systems, polymerization

and tautomerism. The first portion of the second semester is devoted to a discussion of cyclic compounds and the benzene problem; the major portion to stereochemistry, including stereoisomerism, ring formation, and steric hindrance. Assistant Professor Kimball.

Prerequisite: Chemistry 48 or 54. Elective for Seniors in Chemistry. 3 lectures; 3 semester credits.

61, 62. Special Topics in Inorganic Chemistry. The lectures of this course treat with the structure and properties of matter as developed from studies of radioactivity, atomic structure, crystal structure, etc. With these as a foundation the course develops the relations between elements as they occur in the periodic arrangement. Werner's theory of complex compounds is considered at the close of the year. An effort is made to develop the historical background of all these topics as they are discussed. Assistant Professor Funkhouser.

Prerequisite: Chemistry 22. Required of Juniors in Chemistry; elective for others. 2 lectures; 2 semester credits.

71, 72. Industrial Chemistry. This course consists of a study of inorganic chemical processes, organic chemical processes and some of the unit processes of chemical engineering. Professor Iddles and Assistant Professor Mason.

Prerequisite: Chemistry 32 and 48. Required of Seniors in Chemistry. 3 lectures; 3 semester credits.

41, 42. Elementary Physical Chemistry. This course is devoted to those topics in physical and theoretical chemistry which have application in such medical work as physiology, bacteriology, and in other branches of biological science and agriculture. Assistant Professor Mason.

Prerequisite: Chemistry 2, Elementary Physics, and some training in college mathematics. 2 lectures; 2 semester credits.

83, 84. Physical Chemistry. This course will take up the general principles of chemistry from the quantitative standpoint. It will include a study of the properties of gases, liquids and solids. The principles of thermodynamics will be presented and their application to chemistry discussed. These will be used as a basis for the study of solutions, ionic theory, chemical equilibria, thermo-chemistry, con-

ductance, and electromotive force. The experiments in the laboratory will include accurate measurements illustrating the principles studied in the lectures. Problems will be assigned for solution by the student. Assistant Professor Mason.

Prerequisite: Chemistry 32, Mathematics 8, Physics 8. Required of Seniors in Chemistry. 3 lectures; 2 laboratories; 5 semester credits. Deposit: Ten dollars for the year.

87, 88. Thesis, Bibliography and Seminar. The thesis time is devoted to some selected subject, and the student is required to present a thesis covering the related background and experimental observations of his year's investigation. In one class meeting a week a discussion designed to aid the student in the use of the chemical library is presented. Actual problems are assigned requiring the use of various chemical journals, dictionaries, reference books and other sources of information on chemical subjects. Following this section of work the class period is devoted to individual student reports on recent topics of interest in chemistry. Members of the staff.

For Seniors in Chemistry who have completed Chemistry 32 and 48. 1 lecture; 5 laboratories; 7 semester credits. Deposit: Ten dollars for the year.

For courses primarily for graduate students, see Catalog of the Graduate School.

CIVIL ENGINEERING

Edmond W. Bowler, *Professor*
Russell R. Skelton, *Associate Professor*
Charles O. Dawson, *Instructor*
William J. Locke, *Assistant*

1. Surveying. The theory and use of surveying instruments and methods, including measurement of angles, direction and distance, differential and profile leveling, trigonometric and stadia leveling, note keeping, stadia surveys, land surveying, calculations and plotting relating to traverses, and topographic surveying, mapping and drawing. Mr. Dawson and Mr. Locke.

Prerequisite: Mathematics 2. Required of Sophomores in Civil Engineering. 2 recitations; 4 laboratories; 6 semester credits.

2. Surveying. Further theory and use of surveying instruments and methods, including the plane table, city surveying, observations on the sun and polaris for latitude, longitude, time and azimuth, highway and railway curves, adjustment of surveying instruments, and the solution of miscellaneous problems in plane and topographic surveying. Mr. Dawson and Mr. Locke.

Prerequisite: Civil Engineering 1. 1 recitation; 3 laboratories; 4 semester credits.

4. Location Surveying and Earthwork. Theory and practice relating to location surveys as applied to preliminary surveys for highways, railroads, bridges, pipe lines and sewer lines. Theory and problems in earthwork, including earthwork computation, cross-sectioning, slope stakes, vertical curves, and mass diagram method of distribution. A field survey is made to demonstrate the fundamentals of location. Associate Professor Skelton.

Prerequisites: Civil Engineering 1 and Civil Engineering 2, either in parallel or as a prerequisite. Required of Sophomores in Civil Engineering. 1 recitation; 1 laboratory; 2 semester credits.

5, 6. Location Surveying and Mapping. The completion of the field survey started in Civil Engineering 4; from these notes a map is prepared. A paper location is projected on the map, from which studies are made towards a final location. The final location is made in the field during the second semester, involving: the establishment of the center line for about one mile of highway, the taking of cross section notes, additional topography, and staking out structures. Associate Professor Skelton.

Prerequisite: Civil Engineering 4. Required of Juniors in Civil Engineering. 1 laboratory; 1 semester credit.

7. Surveying. The theory and use of surveying instruments and methods on plane surveys, including measurement of angles, direction and distance, differential and profile leveling, calculations relating to traverses, and observations on the sun for direction. Mr. Dawson.

Prerequisite: Mathematics 6 or 22. Required of Sophomores in Forestry. 2 laboratories; 2 semester credits.

8. Surveying. The theory and use of surveying instruments and methods in topographic surveying and mapping, including a topo-

graphic survey of a small area in the field and the plotting of a topographic map of the same area in the drafting room, and observations on the polaris for direction. Mr. Dawson.

Prerequisite: Civil Engineering 7. Required of Sophomores in Forestry. 2 laboratories; 2 semester credits.

9, (9). Surveying. Theory and use of the tape, transit and level in making plane surveys with computations and drafting exercises necessary to plot field notes. Professor Bowler and Mr. Locke.

Prerequisite: Mathematics 2. Required of Sophomores in Electrical Engineering during first semester and of Sophomores in Mechanical Engineering during second semester. 1 recitation; 1 laboratory; 2 semester credits.

16. Engineering Materials. This course is arranged to acquaint the student with the methods of manufacture, physical properties and the application of the various materials in engineering use, including timber, steel, stone, brick, cement, concrete, gravel and bituminous materials. Associate Professor Skelton.

Prerequisites: Geology 7 and Mechanical Engineering 10, either in parallel or as prerequisites. Required of Juniors in Civil Engineering. 2 recitations; 2 semester credits.

22. Hydraulics. A study of the principles of hydrostatics and hydrokinetics, including the laws governing static pressures, the flow of water through orifices, tubes, nozzles, weirs, pipe lines and open channels, the dynamic action of jets and streams and fluid flow in pipes. This course includes laboratory exercises in hydraulic machinery and in stream gaging. Professor Bowler.

Prerequisite: Mechanical Engineering 9. Required of Juniors in Civil Engineering. 3 recitations; 1 laboratory; 4 semester credits.

23. Hydraulics. Fundamental principles of hydrostatics and hydrokinetics. A study of fluid pressures, hydraulic gauges and meters, flow through pipes, tubes, orifices and nozzles, flow over weirs, flow in open channels, and the dynamic action of jets and streams. Mr. Dawson.

Prerequisite: Mechanical Engineering 9, either in parallel or as a prerequisite. Required of Seniors in Electrical Engineering. 2 recitations; 2 semester credits.

24. Hydraulics. Fundamental principles of hydrostatics and hydrokinetics. A study of fluid pressure and fluid flow, hydraulic gauges and meters, flow through pipes, tubes, orifices and nozzles, flow over weirs, flow in open channels, the dynamic action of jets and streams, and the theory of tangential and reaction turbines. Mr. Dawson.

Prerequisite: Mechanical Engineering 7. Required of Juniors in Mechanical Engineering. 3 recitations; 3 semester credits.

27, 28. Theory of Structures. The graphical and analytical methods of determining reactions, moments and shears in beams, girders and trusses under fixed and moving loads and the stresses in various structures including simple, subdivided and multiple trusses, portals, viaducts, cantilevers and three-hinged arches. The computation of deflections and the application of the method of least work to statically indeterminate structures. Professor Bowler.

Prerequisite: Mathematics 8, and Mechanical Engineering 9 and 10 as prerequisites or in parallel. Required of Juniors in Civil Engineering. 3 recitations; 1 laboratory; 4 semester credits.

31. Highway Engineering and Transportation. A detailed study of the economics of location and design of highways and city streets, the methods of construction, maintenance and the specifications governing the various types of surfaces, and the administration and financing of our highway system. Special emphasis is given to the study of highway transportation. The subject is presented by means of lectures, recitations, field location, and the complete design of a section of highway. Associate Professor Skelton.

Prerequisites: Civil Engineering 6 and Civil Engineering 16. Required of Seniors in Civil Engineering. 2 recitations; 2 laboratories; 4 semester credits.

32. Transportation Engineering. A course embracing a study of the transportation forms, methods and facilities of land, water and air carriers, with emphasis on the various problems incidental to operation, engineering development, and the influence of transportation on our national growth. This course includes a brief study of railroad construction and maintenance from an engineering viewpoint, and is presented by lectures, recitations, problems and assigned reading. Associate Professor Skelton.

Prerequisite: Civil Engineering 31. Required of Seniors in Civil Engineering. 2 recitations; 1 laboratory; 3 semester credits.

33, 34. Hydraulic and Sanitary Engineering. A study of water power engineering, water supply and purification and sewerage and sewage disposal. This course covers precipitation, water losses, run-off, drainage areas, stream flow, water power estimates, hydraulic turbines, dams and water ways; the sources, quantity, quality and sanitary aspects of public water supplies; the methods of purification and distributing systems; the theory and problems of sewerage, the principles governing the disposal of sewage and the various methods of sewage treatment. This course consists of lectures, recitations, computations, reports and problems of design. Professor Bowler and Mr Locke.

Prerequisite: Civil Engineering 22. Required of Seniors in Civil Engineering. 3 recitations; 1 laboratory; 4 semester credits.

35. Structural Design. Theory and problems relating to the design of steel and timber structures. A steel girder and steel roof truss are completely designed and working drawings prepared. Individual parts of steel bridge trusses and buildings are studied and designed. Emphasis is placed on economy of design, accuracy of results, clarity of vision and analytical thought. Associate Professor Skelton.

Prerequisite: Civil Engineering 28. Required of Seniors in Civil Engineering. 2 recitations; 2 laboratories; 4 semester credits.

36. Reinforced Concrete Structures. A course arranged to cover with equal emphasis the theory and design of reinforced concrete structures, such as beams, slabs, columns, footings, retaining walls and small bridges. The problems relating to construction are studied together with problems illustrating the theory. Associate Professor Skelton.

Prerequisite: Civil Engineering 35. Required of Seniors in Civil Engineering. 2 recitations; 2 laboratories; 4 semester credits.

38. Thesis. The student selects a subject of engineering, scientific or commercial interest for investigation or design. The results of his

studies are presented as a thesis in which equal emphasis is placed upon composition and accuracy of subject-matter. The student confers with a member of the department each week for discussion of progress and for guidance in study. Departmental standards for form of presentation are strictly followed. Professor Bowler, Associate Professor Skelton and Mr. Dawson.

Prerequisite: English 81. Required of Seniors in Civil Engineering. 1 conference each week; 2 semester credits.

41, 42, 43, 44. Student Chapter of the American Society of Civil Engineers. Junior and Senior students in Civil Engineering are required to join the student chapter of the American Society of Civil Engineers. In addition to the ordinary life of the student chapter which is carried on under the guidance of the student officers, the chapter meets once a week under the direction of an instructor. These meetings consist chiefly of the presentation of prepared addresses by the student members. Professor Bowler and Associate Professor Skelton.

Required of Juniors and Seniors in Civil Engineering. No Credit.

DAIRY HUSBANDRY

Kenneth S. Morrow, *Professor*
Herbert C. Moore, *Assistant Professor*

2. Fundamentals of Dairying. A general survey of the dairy industry, with definite study of the composition and properties of milk and other dairy products, dairy manufacturing processes, and market milk; the selection and judging of dairy cattle. Professor Morrow and Assistant Professor Moore.

Recommended elective for Freshmen or Sophomores in Agriculture not specializing in Dairy Husbandry. 2 lectures; 1 laboratory; 3 semester credits.

3. Dairy Cattle. A study of pure-bred dairy cattle; breed history; pedigrees; family lines and methods of outstanding breeders; the application of the principles of genetics to the improvement of dairy cattle; herd analysis. Professor Morrow.

Required of Seniors in Dairy Husbandry. 2 lectures; 1 laboratory; 3 semester credits.

4. Milk Production. A study of the feeding and management of dairy animals; calf feeding; raising young stock; feeding for economical milk production. Professor Morrow.

Required of Seniors in Dairy Husbandry. 2 lectures; 1 laboratory; 3 semester credits.

5. Market Milk. A study of the producing, handling, and distributing of market and certified milk; dairy farm inspection; control of milk supply. Assistant Professor Moore.

Required of Seniors in Dairy Husbandry. 2 lectures; 1 laboratory; 3 semester credits.

6. Ice Cream. A study of the making, handling, and marketing of ice cream and ices. Assistant Professor Moore.

Required of Seniors in Dairy Husbandry. 2 lectures; 1 laboratory; 3 semester credits.

7. Butter and Cheese. (1) A study of the secretion and of the chemical and physical properties of milk; pasteurization; cream ripening; starters; churning; organization and operation of factories. (2) A study of the manufacturing and marketing of more important types of cheese. Assistant Professor Moore.

Required of Juniors in Dairy Husbandry. 1 lecture; 1 laboratory; 2 semester credits.

9. Domestic Dairying. Nutritive value of milk, market milk, modified milk, certified milk, condensed milk, milk powder, fermented milk, butter, cheese, and ice cream. Laboratory exercises are given in the manufacture of dairy products. Assistant Professor Moore.

Elective for Juniors and Seniors in Home Economics and Liberal Arts curricula. 2 lectures; 1 laboratory; 3 semester credits.

10. Dairy Bacteriology. A study of the methods of bacteriological analysis of milk and its products; relation of bacteria to milk and its products; study of effect of bacteria in milk on separation, clarification, pasteurization, aeration, and straining; and the application of bacteriological principles to the dairy industry. Assistant Professor Moore.

Prerequisite: Bacteriology 1. Required of Juniors in Dairy Husbandry. 2 lectures; 2 laboratories; 4 semester credits.

12. Dairy Seminar. Studies of experiment station and other literature covering the field of dairy husbandry. Professor Morrow.

Required of Seniors in Dairy Husbandry. Elective for other students. 1 lecture; 2 semester credits.

13, 14. Dairy Cattle and Dairy Products Judging. (1) The comparative judging of dairy cattle. Animals in the college herd and in nearby herds will be judged. (2) The various standards and grades of dairy products will be studied. Practice will be given in judging milk, butter, cheese, and ice cream.

Cattle judging given first half of fall semester and last half of spring semester; products judging alternates with this schedule. Students interested in competing for places on college judging teams should elect this course. Professor Morrow and Assistant Professor Moore.

Prerequisite: Dairy Husbandry 13. Required of Juniors in Dairy Husbandry. 1 laboratory; 1 semester credit.

16. Advanced Dairy Science. Basic data, fundamental observations, and discussions of research contributing to the present status of the dairy industry. Assistant Professor Moore.

Required of Seniors in Dairy Husbandry. Elective for other students who have adequate preparation in chemistry and bacteriology. 2 lectures; 2 semester credits.

ECONOMICS AND ACCOUNTING

Harry W. Smith, *Professor*
Arthur W. Johnson, *Associate Professor*
Norman Alexander, *Associate Professor*
John D. Hauslein, *Assistant Professor*
Ruth J. Woodruff, *Assistant Professor*
Clair W. Swonger, *Assistant Professor*
*Carroll M. Degler, *Assistant Professor*
Ruth C. Adams, *Instructor*
Irving R. Hobby, *Instructor*

* Leave of absence, 1936-37.

ECONOMICS AND ACCOUNTING

Economics

Students majoring in Economics are expected to take Economics 1 and 2.

History, Philosophy and American Government will be approved as related work for a major in Economics.

1, 2. Principles of Economics. The fundamental principles which explain the organization and operation of the economic system.

Prerequisite: 1 prerequisite for 2. Required of General Business students. Elective for other Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

3. Economic and Commercial Geography. The economic aspects of geography. The sources and methods of production of the world's staple commodities. The influence of physical environment on economic, commercial, and financial development of Europe. Assistant Professor Swonger.

Required of General Business students. Elective for Sophomores. 3 lectures or recitations; 3 semester credits.

4. Economic and Commercial Development of the United States. The economic, commercial, and financial development of the United States. Professor Smith and Assistant Professor Degler.

Required of General Business students. Elective for Sophomores. 3 lectures or recitations; 3 semester credits.

5. Economic and Commercial Development of Europe. The economic, commercial, and financial development of Europe. Assistant Professor Degler.

Elective for Sophomores. 3 lectures or recitations; 3 semester credits. (Not given in 1937-38)

51. Labor Problems. This course deals with the historical background and present status of labor organizations and problems. Professor Smith.

Prerequisite: Economics 2. Required of General Business students. 3 lectures or recitations; 3 semester credits.

52. Public Finance. This course presents the theory and practice

of public expenditures and collection of public revenues. It emphasizes changed tendencies and policies in taxation reform. Particular attention will be given to taxation problems in the State of New Hampshire. Professor Smith.

Prerequisite: A satisfactory average in 12 semester credits in Economics. 3 lectures or recitations; 3 semester credits.

11. Transportation. This course gives an account of the development and organization of transportation agencies. Professor Smith.

Prerequisite: Economics 2. 3 lectures or recitations; 3 semester credits.

12. International Trade. The basic theories of international trade, foreign exchange and international payments.

Prerequisite: Economics 2. 3 lectures or recitations; 3 semester credits.

53, 54. Money and Banking. The theory and practice of money and banking. Assistant Professor Swonger.

Prerequisite: Economics 2. 13 prerequisite for 14. Required of General Business students. Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

55. Corporations. The development and forms of business organization and combination. Assistant Professor Degler.

Prerequisite: Economics 2. Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

56. Corporation Finance. The methods of financing corporate enterprise. Assistant Professor Swonger.

Prerequisite: Economics 15. Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

21, 22. Commercial Law. The law of contracts, agency, sales, and negotiable instruments. Associate Professor Alexander.

Required of General Business students. Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

23. Public Regulation of Business. A study of the federal control of business organizations and their activities with special reference to anti-trust legislation. Associate Professor Alexander.

Prerequisite: Economics 2. Required of General Business students. Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

24. Marketing. The economics of the marketing functions, agencies, and special problems of marketing. Assistant Professor Degler.

Prerequisite: Economics 2. Required of General Business students. Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

57, 58. History of Economics. It is the aim of this course to present a critical account of the development of economic thought in the leading nations of the Western world; to study the economic systems of Greece, Rome, medieval and modern Europe, including the manorial, guild, mercantile, kameralistic, physiocratic, laissez faire, classical, historical and socialistic systems; and to indicate the important relations of economic philosophy to historical, political and social environment. Professor Smith.

Prerequisite: Senior standing and a satisfactory average in 12 semester credits in Economics. 3 lectures or recitations; 3 semester credits.

59, 60. Seminar in Current Economic Problems. Professor Smith.

Elective for Seniors majoring in Economics who have attained a satisfactory average in the department. Recitations and reports; 3 semester credits.

Service Courses

Economics 45, 46; 47, 48 are service courses for the College of Technology.

45. Business Organization and Finance. Assistant Professor Swonger.

For Juniors in the College of Technology only. 2 lectures or recitations; 2 semester credits.

46. Public Regulation of Industry. Associate Professor Alexander.

For Juniors in the College of Technology only. 2 lectures or recitations; 2 semester credits.

47, 48. Economic History of the Working Classes. Professor Smith.

For Juniors in the College of Technology only. 1 lecture or recitation; 1 semester credit.

ACCOUNTING

Note.—Students who have completed two or more years of bookkeeping in preparatory school will be permitted to register for Intermediate Accounting (3, 4) upon passing an examination covering the material of Elementary Accounting (1, 2).

Schedule the following courses as Acct. 1, etc.

1, 2. Elementary Accounting. A thorough study of the basic principles and theory of accounting. Extensive practice in accounting problems of the single proprietorship and partnership types of business organization. Assistant Professor Hauslein.

Prerequisite: 1 prerequisite for 2. Required of General Business Sophomores. Elective for other Sophomores, Juniors and Seniors. 2 lectures or recitations; 2 laboratories; 4 semester credits.

3, 4. Intermediate Accounting. This course is designed to follow 2, continuing with the work in partnerships, followed by a comprehensive study of corporation accounting. Extensive practice work in handling problems of corporation accounting. Associate Professor Johnson.

Prerequisite: 3 prerequisite for 4. Required of General Business Juniors. Elective for students who have completed Accounting 2 or its equivalent. See note above. 2 lectures or recitations; 2 laboratories; 4 semester credits.

5, 6. Advanced Accounting. Advanced theory of accounting and extensive practice in solving problems involving such theory. Study of Federal Income Tax law and the accounting procedure in connection therewith. Practice in computing income tax returns. Associate Professor Johnson.

Prerequisite: 5 prerequisite for 6. Elective for students who have completed Accounting 4 or its equivalent. 2 lectures or recitations; 2 laboratories; 4 semester credits.

7, 8. Cost Accounting. The relation of cost accounting to general accounting. The place of cost accounting in modern business. Study of types of cost systems and their application to particular lines of business. Careful analysis of methods of computing costs. Effect of recent Federal legislation on cost accounting. Associate Professor Johnson.

Prerequisite: 7 prerequisite for 8. Elective for students who have completed Accounting 4 or its equivalent. 2 lectures or recitations; 2 laboratories; 4 semester credits.

SECRETARIAL STUDIES

Schedule the following courses as Shorthand 1, etc., and Typewriting 7, etc.

1, 2. Shorthand. A thorough study of the fundamental principles of Gregg shorthand. Miss Adams.

Prerequisite: 1 prerequisite for 2. Required of Secretarial students. 5 lectures or recitations; 3 semester credits.

3, 4. Shorthand and Office Practice. This is an advanced course in shorthand. The second semester will combine the work of the second semester of Advanced Typewriting with laboratory projects in which shorthand, typing, filing, mailing, mimeographing, and other modern office projects that will furnish valuable secretarial experience will be directed and supervised. Miss Adams.

Prerequisite: Shorthand 2, or the equivalent. 3 prerequisite for 4. Required of Secretarial students. 5 lectures, recitations, or laboratories; 3 semester credits.

7, 8. Typewriting. This course includes keyboard drill, practice in tabulating, setting up letters and business forms. Miss Adams.

Prerequisite: 7 prerequisite for 8. Required of Secretarial students. 5 laboratories; 2 semester credits.

9, 10. Typewriting. Transcription of shorthand notes. Typing of legal and technical forms, etc. To be taken only in conjunction with Shorthand 3, 4. For second semester, see description of Shorthand 4. Miss Adams.

Prerequisite: 9 prerequisite for 10. Required of Secretarial students. 5 laboratories; 2 semester credits.

UNIVERSITY OF NEW HAMPSHIRE

EDUCATION

A. Monroe Stowe, *Professor*
Harlan M. Bisbee, *Associate Professor*
Gladys MacPhee, *Assistant*

Helen F. McLaughlin, *Professor* (*Home Economics-Education*)
Lucinda P. Smith, *Associate Professor* (*English-Education*)
Walter E. Wilbur, *Associate Professor* (*Mathematics-Education*)
Margaret R. Hoban, *Assistant Professor* (*Physical Education*)
John A. Floyd, *Instructor* (*French-Education*)
*Earl H. Little, *Instructor* (*Agriculture-Education*)

The purpose of the courses in Education is to unite and correlate the forces of the University which contribute to the preparation of educational leaders in teaching and supervision in the secondary schools.

Freshmen who plan to complete the University Teacher Training Curriculum in the teaching of history or social studies should elect European History (History 3, 4).

Prospective teachers, in order to be certified for cadet teaching, must complete the following courses in Education with a grade of at least 75 in each course: Education 41, 42; 51, 52; and 61 or (61).

Since the State requires each candidate for certification to be prepared to teach three subjects which are referred to as "teaching major" and first and second "teaching minors," the University Teacher Training Curriculum requires the prospective teacher to complete satisfactorily 24 semester credits in a teaching major, 12 semester credits in a first teaching minor, and at least 12 semester credits in a second teaching minor.

Majors in other departments may complete their preparation for teaching by organizing their work so as to include the education courses and the teaching major and minors described in the University Teacher Training Curriculum. (See page 104)

41, 42. Psychological Principles of Secondary Education. The purpose of this course in educational psychology is to help students acquire an appreciative understanding of important principles of human behavior, of the educational needs of adolescents, and of the most effective ways of meeting those needs. Professor Stowe.

* Representing the State Department of Education in the administration of the Smith-Hughes Act.

Prerequisite: 41 prerequisite for 42. Open to Sophomores. Required of students completing the University Teacher Training Curriculum. 3 class meetings; 3 semester credits.

45, (45). New Hampshire State Program of Studies and School Law. A study of the aims and purposes, the plan of organization and administration of the secondary school as outlined in the New Hampshire State Program of Studies and School Law. Associate Professor Bisbee.

Open to Juniors and Seniors. Preparatory for the State Examinations in Secondary Program and in School Law. 2 class meetings; 2 semester credits.

51, 52. Social Principles of Secondary Education. This course in educational sociology and secondary education is devoted to a consideration of the educationally significant aspects and needs of our modern democratic society and to a study of the organization, functions, curricula and outstanding problems of our American institutions of secondary education. Professor Stowe.

Prerequisite: Education 41, 42. 51 prerequisite for 52. Required of students completing the University Teacher-Training Curriculum. 3 class meetings; 3 semester credits.

61, (61). Principles and Problems of Teaching in the Secondary School. This course is devoted to a study of the following aspects of teaching in secondary schools: (1) Secondary school objectives and the objectives in the teaching of secondary school subjects; (2) principles of teaching and of directing learning incorporated in teaching which meets the needs of high school students and attains the objectives of the secondary school; (3) secondary school tests and the ways in which teachers are endeavoring to ascertain the extent to which their objectives are being attained; (4) class management, the purpose of which is to insure conditions favorable to the attainment of the objectives of the secondary school. Associate Professor Bisbee.

Prerequisite: Education 41, 42. Required of students completing the University Teacher Training Curriculum. 3 class meetings; 3 semester credits.

71, 72. History of Education. Students who are interested are advised to elect History 53, 54. (Not given in 1937-38)

75. Democracy in Education and Character Development. This course will discuss student participation in high school control; social functions; the underlying principles of club work; the problem of character education and a discussion of the moral standards in our high schools as revealed by investigations. Associate Professor Bisbee.

Prerequisite: Education 41, 42. 3 class meetings; 3 semester credits.

76. Philosophy of Education. A consideration of the fundamental concepts and ultimate objectives of education, current educational doctrines and controversies, changes in educational procedures, historic background and philosophical implications. Associate Professor Bisbee.

Prerequisite: Education 51, 52. 3 class meetings; 3 semester credits.

COURSES IN PROBLEMS IN THE TEACHING OF HIGH SCHOOL SUBJECTS

†The following courses in professionalized subject-matter are devoted to a study of problems of objectives, selection and organization of subject-matter, teaching and testing techniques and classroom management in the teaching of the respective subjects. A student desiring to do supervised teaching must complete with a grade of at least 75 one of these courses in the subject in which he hopes to do supervised teaching.

Agriculture-Education (Ag-Ed) 92. Problems in the Teaching of High School Agriculture. Mr. Little.

Required of Seniors taking the Agricultural Teacher-Training Curriculum, and open only to those students. The equivalent of 2 class meetings; 2 semester credits.

† For details concerning prerequisites and nature of these courses, see descriptions given under respective subject-matter departments.

English-Education (Eng-Ed) 91. Problems in the Teaching of High School English. Associate Professor Smith.

3 class meetings; 3 semester credits.

French-Education (Fr-Ed) 91. Problems in the Teaching of High School French. Mr. Floyd.

3 class meetings; 3 semester credits.

Home Economics-Education (HE-Ed) 91. Problems in the Teaching of High School Home Economics. Professor McLaughlin.

Required of Seniors in Home Economics Teacher Training and Extension Curricula. 3 class meetings; 3 semester credits.

Mathematics-Education (Math-Ed) 91. Problems in the Teaching of High School Mathematics. Associate Professor Wilbur.

3 class meetings; 3 semester credits.

Physical Education (P–E) 91, 92. Problems in the Teaching of Physical Education for Women. Assistant Professor Hoban.

3 class meetings; 2 laboratories; 4 semester credits.

*Biology-Education (Bi–Ed) 91. Problems in the Teaching of High School Biology.

Open to Seniors and graduate students who have satisfactorily completed one year of college biology and Education 61, or 141–a, 142–b, or 40–c. Required of students who desire to do supervised teaching in biology. 3 class meetings; 3 semester credits.

*Chemistry-Education (Ch–Ed) 91. Problems in the Teaching of High School Chemistry.

Open to Seniors and graduate students who have had two years of college chemistry and have satisfactorily completed Education 61, 141–a, 142–b, or 40–c. Required of students who desire to do supervised teaching in Chemistry. 3 class meetings; 3 semester credits.

*Physics–Education (Ph–Ed) 91. Problems in the Teaching of High School Physics.

* Not offered in 1937-1938, but offered in the summer session.

Open to Seniors and graduate students who have satisfactorily completed one year of college physics and Education 61, or 141–a, 142–b, or 40–c. Required of students who desire to do supervised teaching in physics. 3 class meetings; 3 semester credits.

History–Education (Hist–Ed) 91. Problems in the Teaching of High School History.

Open to Seniors and graduate students who have satisfactorily completed the following courses: History 7, 8; Political Science 1, 2; either Economics 1, 2 or 4; and Education 61. Required of all students who desire to do supervised teaching in history. 3 class meetings; 3 semester credits.

COURSES IN SUPERVISED TEACHING

The work in supervised teaching is under the direction of the Professor and Associate Professor of Education serving as Director and the Associate Director of Student Teaching. Students teach under the general direction of the members of the University instructional staff conducting the courses in problems of teaching the various school subjects. Students teach under the immediate direction of selected classroom teachers in high schools approved by the University.

In the supervised teaching courses the student participates in the conduct of class exercises and in the control of the classroom, at first chiefly as an observer, but gradually entering into teacher responsibilities until complete charge of the classroom is secured. Frequent conferences and discussions.

This work is required in the Teacher Training Curriculum. It is open only to students whose applications are approved by the head of the Department of Education and the supervisor of student teaching in the subject or subjects in which the applicant desires to do supervised teaching. Applications should be filed in the office of the Department of Education in October of the academic year in which the supervised teaching is to be done. No applications will be considered unless the applicant has completed with a grade of at least 75 the following courses in Education: 41, 42 (or 121–a, 122–b, and 123–c), 51, 52, (or 131–a, 132–b, and 133–c), and 61, (or 141–a, 142–b) and, with an average grade of 75 or better, at least 18 semester credits in the subject-matter field in which he desires to teach under supervision.

The applicant must also complete with a grade of at least 75 a course in the problems of teaching the subject in which he desires to do supervised teaching.

Students may be enrolled for from 6 to 10 semester credits of work in supervised teaching in the second semester of the academic year.

Education-Agriculture (Ed-Ag) 93. Supervised Teaching in High School Agriculture. Each Senior in the Teacher Training Curriculum will spend at least ten weeks as an apprentice teacher in some agricultural high school selected by the State Commissioner of Education and the Professor of Education at the University of New Hampshire. This work will be in charge of the regular teacher of agriculture in the high school, and will be supervised by the instructor in agricultural education at the University of New Hampshire. Mr. Little.

Required of Seniors taking the Agricultural Teacher Training Curriculum, and open only to those students.

Education-Biology (Ed-Bi) 94. Supervised Teaching in High School Biology. Prerequisite: Bi-Ed 91.

Education-Chemistry (Ed-Chem) 94. Supervised Teaching in High School Chemistry. Prerequisite: Ch-Ed 91.

Education-Civics (Ed-Civ) 94. Supervised Teaching in High School Civics. Prerequisite: Hist-Ed 91.

Education-Commerce (Ed-CS) 94. Supervised Teaching in High School Commercial Subjects.

Education-Economics (Ed-Econ) 94. Supervised Teaching in High School Economics. Prerequisite: Hist-Ed 91..

Education-English (Ed-Eng) 94. Supervised Teaching in High School English. Prerequisite: Eng-Ed 91.

Education-French (Ed-Fr) 94. Supervised Teaching in High School French. Prerequisite: Fr-Ed 91.

Education-History (Ed-Hist) 94. Supervised Teaching in High School History. Prerequisite: Hist-Ed 91.

Education-Industrial Arts (Ed-IA) 94. Supervised Teaching in High School Industrial Arts.

Education-Latin (Ed-Lat) 94. Supervised Teaching in High School Latin.

Education-Mathematics (Ed-Math) 94. Supervised Teaching in High School Mathematics. Prerequisite: Math-Ed 91.

Education-Physics (Ed-Ph) 94. Supervised Teaching in High School Physics. Prerequisite: Ph-Ed 91.

Education-Sociology (Ed-Soc) 94. Supervised Teaching in High School Sociology. Prerequisite: Hist-Ed 91.

Home Economics-Education (HE-Ed) 94. Supervised Teaching in High School Home Economics. Professor McLaughlin.

Required of Seniors in Home Economics Teacher Training Curriculum. Prerequisite: HE–Ed 91.

Education-Zoölogy (Ed-Zoöl) 94. Supervised Teaching in High School Zoölogy. Prerequisite: Bi-Ed 91.

Education-Botany (Ed-Bot) 93. Supervised Teaching in High School Botany.

ELECTRICAL ENGINEERING

Leon W. Hitchcock, *Professor*
Frederick D. Jackson, *Assistant Professor*
William B. Nulsen, *Assistant Professor*

1, 2. Electrical Engineering. An elementary study of electrical circuits and machinery. Professor Hitchcock.

Required of Sophomores in Electrical Engineering. 1 recitation; 1 laboratory; 2 semester credits.

3, 4. Electrical Engineering. A continuation of Electrical Engineering 2. Electric and magnetic circuits, direct current generators and motors, armature windings, batteries, alternating current circuits, alternators and transformers. Professor Hitchcock and Assistant Professor Jackson.

Prerequisites: Physics 8, Mathematics 8 and Electrical Engineering 2. Required of Juniors in Electrical Engineering. 3 recitations; 3 semester credits.

5. Electrical Engineering. A continuation of Electrical Engineering 4. Induction motors, regulators, synchronous motors,

converters and rectifiers; transmission line regulation, efficiency, insulation, lightning protection, sag and tension, etc. Professor Hitchcock.

Prerequisite: Electrical Engineering 4. Required of Seniors in Electrical Engineering. 3 recitations; 3 semester credits.

7. Electronics and Communication. The principles of electron tubes and their application to communication and industry; the fundamentals of sound, speech and hearing; the principles of radio transmission and reception; basic telephone apparatus and circuits. Assistant Professor Jackson.

Prerequisite: Electrical Engineering 4, 33, 35 or 38. Required of Seniors in Electrical Engineering. 3 recitations; 3 semester credits.

8. Electronics and Communication. A continuation of Electrical Engineering 7. A more detailed study of telephone transmission including inductive interference, equivalent networks, the infinite transmission line, the determination of line and cable characteristics, repeaters, filters, electron tube experiments, measurement of transmission characteristics, and the study of routine repeater tests. Assistant Professor Jackson.

Prerequisite: Electrical Engineering 7. Elective for Seniors in Electrical Engineering. 3 recitations; 1 laboratory; 5 semester credits.

10. Advanced Circuit Theory. Application of mathematics to the solution of electrical circuit problems, including the use of differential equations, Heaviside's operators, and symmetrical phase components; derivation of fundamental formulas and constants. Assistant Professor Nulsen.

Prerequisite: Electrical Engineering 5. Elective for selected Seniors in Electrical Engineering. 3 recitations; 1 laboratory; 4 semester credits.

12. Illumination. Principles of illumination and photometry, light sources, residential and commercial lighting, street lighting,

display and advertising lighting; wiring methods and calculations; National Electrical Code rules. Assistant Professor Nulsen.

Required of Seniors in Electrical Engineering. Elective for students who have completed Electrical Engineering 33, 35 or 38. 2 recitations; 2 semester credits. (Formerly E.E. 9.)

13, 14. Electrical Problems. The solution of problems involving magnetic circuits, direct and alternating current circuits and machinery, and complex notation. Professor Hitchcock and Assistant Professor Nulsen.

Required of Juniors in Electrical Engineering. 2 recitations; 2 semester credits.

15, 16, 17, 18. Student Branch of the American Institute of Electrical Engineers. A student organization conducted in accordance with the by-laws of the Institute with meetings given a place on the student's class schedule. Each student is required to present and discuss an approved subject. At times the meeting may take the form of a debate, an address by an outside lecturer or a motion picture of an instructive nature. Students in this course must become student members of the A.I.E.E. and must subscribe to a magazine selected by the department.

Required of Juniors and Seniors in Electrical Engineering. 1 recitation; no credit.

23, 24. Laboratory. Operation and test of direct and alternating current equipment; study of laboratory practice and report presentation. Assistant Professor Nulsen.

Prerequisite: Electrical Engineering 2. Required of Juniors in Electrical Engineering. 1 laboratory; 2 semester credits.

25. Laboratory. A continuation of Electrical Engineering 24. Assistant Professor Nulsen.

Prerequisite: Electrical Engineering 24. Required of Seniors in Electrical Engineering. 2 laboratories; 4 semester credits.

26. Laboratory. Advanced laboratory testing and special problems. The student works on problems of his own selection which have been definitely outlined by him and have received approval. This may take the form of a semester thesis, or it may consist of a

series of original experiments in which the student is especially interested. Assistant Professor Nulsen.

Prerequisite: Electrical Engineering 25. Elective for selected Seniors in Electrical Engineering. 4 laboratories; 4 semester credits.

28. Advanced Electronics Laboratory. Special radio problems or electron tube applications of a research nature for Technology Seniors. Assistant Professor Jackson.

Prerequisite: Electrical Engineering 7. Elective with permission of the department. Laboratories and conferences; 4 semester credits.

31. Electric Circuits. Adapted primarily to students in architecture. A study of types of lighting fixtures, the service for which each is designed and the proper spacing and mounting height; outlets for fixtures, appliances and switches; methods of attaching outlets; circuits; individual and group control; exposed and concealed wiring; entrance and meter location; costs of wiring; the calculation of wire sizes for circuits; a comparison of the three-wire with the two-wire system of distribution; the requirements of the National Board of Fire Underwriters in connection with electrical installations; wiring for and methods of control of radio, refrigeration, oil furnaces, elevator, ventilator, signal, alarm and inter-communicating devices; outside lighting, including electric signs, flood lighting, and the lighting of gardens, drives, swimming pools and fountains; underground wiring; studies of specifications. Professor Hitchcock.

Required of students in Architecture. 2 recitations; 2 semester credits. (Given in alternate years; offered in 1937-1938)

33. Fundamentals of Electricity. Fundamentals of electric and magnetic circuits, storage batteries, direct and alternating current equipment, electronics. Assistant Professor Nulsen.

Required of Juniors in Chemistry. 3 recitations; 1 laboratory; 4 semester credits.

35. Construction Equipment. Direct and alternating current circuits, wiring for light and power, generation of electric power, motors, transformers, controlling devices. Professor Hitchcock.

Required of Juniors in Civil Engineering. 3 recitations; 1 laboratory; 4 semester credits.

37, 38. Electrical Machinery. Direct and alternating current circuits, theory and characteristics of electric motors and generators, starting and control equipment. Assistant Professor Jackson.

Required of Juniors in Mechanical Engineering. 3 recitations; 1 laboratory; 4 semester credits.

42. Principles and Applications of Electron Tubes. A study of vacuum tubes, vacuum tube amplifiers, gaseous triodes, photo-electric cells and their application in industry. Assistant Professor Jackson.

Prerequisite: Electrical Engineering 33, 35 or 37. Elective for students not registered in the Electrical Engineering Curriculum. 3 recitations; or 2 recitations and 1 laboratory; 3 semester credits.

ENGLISH

Alfred E. Richards, *Professor*
Harold H. Scudder, *Professor*
William G. Hennessy, *Associate Professor*
Lucinda P. Smith, *Associate Professor*
Edmund A. Cortez, *Assistant Professor*
Paul S. Schoedinger, *Assistant Professor*
Carroll S. Towle, *Assistant Professor*
Robert G. Webster, *Assistant Professor*
Thomas H. McGrail, *Assistant Professor*
Sylvester H. Bingham, *Assistant Professor*
Lawrence H. Houtchens, *Instructor*
Bethyl C. Hennessy, *Assistant*
Barbara Rowell, *Assistant*

GENERAL REQUIREMENTS

All Freshmen are required to take English 1, 2. However, upon the recommendation of the head of the Department of English, and with the approval of the dean of his college, the exceptional student who demonstrates his ability to proceed to more advanced work may be excused from the regular course and enrolled in a special section for work of higher grade.

ENGLISH

DEPARTMENTAL REQUIREMENTS

A major program in the Department of English consists of 24 semester credits of English literature passed with a grade of 75 or better. The following courses are required of all English majors: *Survey of English Literature, Survey of American Literature, Shakespeare's Plays, Chaucer.* Of these courses, all but the first-mentioned (*Survey of English Literature,* which is open to Freshmen) carry major credit if passed with the required grade of 75 or better.

1 (1), 2 (2). Freshman Composition. The aim of this course is to enable the student to write correct English. The principles of exposition, description, and narration are studied. There is drill in the mechanics of composition, and there is constant writing of themes both as outside assignments and as laboratory work in class. Two sections, composed of students who have attained high rank in previous tests in this course, will follow a special program directed by Associate Professor Lucinda P. Smith, assisted by Assistant Professor McGrail. The entire staff of the department will share in the teaching of the course. Associate Professor Smith.

Prerequisite: 1 prerequisite for 2. Required of all Freshmen. 3 recitations; 3 semester credits.

3, 4. Survey of English Literature. A general survey of English literature from its beginnings to the year 1900. Lectures and recitations. Assistant Professor Schoedinger.

Open to all students. 3 lectures or recitations; 3 semester credits.

5, (5). Play Production. This is not an elective, but a laboratory course in the public presentation of notable plays. Members of the course are elected by competitive trial, and credit is given both for acting and for technical assistance. The course is open to all students except, in the first semester, Freshmen. Associate Professor Hennessy.

½ to 3 semester credits.

COURSES PRIMARILY FOR SOPHOMORES

7, 8. Advanced Composition. The study and practice of writing brief impressions, followed by the writing of essays, sketches and narrative. Collateral readings; weekly conferences. Each semester's study must be taken in its chronological order, unless special permission to invert that order is given by the instructor in charge. Assistant Professor Towle.

Prerequisite: English 1, 2. Elective for Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

10. News Writing. A practical study of the preparation of articles for newspapers and magazines. It is for all whose vocations will demand frequent writing for publication, and it is a preparation in part for those who intend to take up newspaper work after graduation. It does not cover the entire field of journalism, but the student will be instructed in the duties of a reporter and be given constant practice in writing news stories. Professor Scudder.

Prerequisite: For Sophomores, a grade of 75 or better in English 1, 2; for Freshmen, the recommendation of the instructor in charge of English 1, 2. 3 lectures or recitations; 3 semester credits. (Formerly 9)

11, 12. Survey of American Literature. Lectures and extensive outside reading. Professor Scudder.

Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits.

14. Mediaeval and Elizabethan Drama. A survey of the English drama, exclusive of Shakespeare, from its beginnings to the closing of the theatres (1642). Professor Scudder and Mr. Houtchens.

Prerequisite: English 1, 2. Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits.

15. Non-Dramatic Elizabethan Poetry. A study of the English Renaissance in non-dramatic poetry and its development throughout the sixteenth century, with special reference to Spencer's *Faerie Queene*. Professor Richards.

Prerequisite: English 1, 2. Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits.

17, 18. English Literature in the Seventeenth Century. Poetry and prose from Shakespeare and Bacon to Swift and Pope, omitting the drama and the works of Milton. The poetry of John Donne and his school; of Jonson, Herrick and the "Cavaliers"; of Denham, Waller and Dryden; of the followers of Spenser, etc. The prose of such writers as Izaak Walton, Bunyan, Sir Thomas Browne, Fuller, Taylor, and John Dryden. One hour of the week will be devoted to round-table discussion in small groups. Assistant Professor Towle.

Prerequisite: English 1, 2; 17 prerequisite for 18. Elective for Sophomores, Juniors, and Seniors. 2 lectures or recitations; 1 laboratory; 3 semester credits. (Not given in 1937-38.)

20. Pope and His Age. The literature of the first half of the eighteenth century, with special reference to Pope, Swift, Addison, and Steele. Assistant Professor Schoedinger.

Prerequisite: English, 1, 2. Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits.

22. Johnson and His Circle. Boswell, Johnson and their time. Professor Scudder.

Prerequisite: English 1, 2. Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits. (Not given in 1937-38.)

23, 24. Victorian Prose. A study of English prose of the nineteenth century. Particular attention is given during the first semester to the work of Coleridge, Lamb, Carlyle, Hazlitt, and Matthew Arnold; in the second semester to the work of John Ruskin as a writer of brilliant prose, art critic, and social reformer. Professor Richards and Assistant Professor Webster.

Prerequisite: English 1, 2. Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits.

25, 26. Victorian Poetry. A study of English poetry from 1830 to 1900, with special reference to the poetry of Tennyson and Browning. Assistant Professor Schoedinger.

Prerequisite: English 1, 2; 25 prerequisite for 26. Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits. (Not given in 1937-38)

28. The Bible as Literature. A study of the various literary types found in the Bible, and a survey of the influence of the Bible on English literature. Professor Richards.

Prerequisite: English 1, 2. Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits.

29, 30. Survey of Art. This course stresses the development of architecture, painting, and sculpture as illustrated by representative masterpieces from the Greek, Roman, Gothic, Renaissance and modern periods. Lectures, assigned readings, and the study of art prints. Associate Professor Hennessy.

Elective for Sophomores, Juniors, and Seniors. 3 lectures; 3 semester credits.

32. Modern British Poetry. A study of British poetry written since 1900. Assistant Professor Towle.

Prerequisite: English 1, 2. Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits.

34. Modern American Poetry. A study of American poetry written since 1900. Assistant Professor Towle.

Prerequisite: English 1, 2. Elective for Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits. (Not given in 1937-38)

35, (35). Public Speaking. Practice in the use of time, change in pitch, emphasis, and inflection of voice; drills in articulation and pronunciation; exercises in posture and poise; extemporaneous speaking; a foundation course for prospective business men and teachers. Assistant Professor Cortez.

Elective for Sophomores, Juniors, and Seniors. 3 recitations; 2½ semester credits.

36. Oral Reading. The art of reading from the page; expressive reading of lyrics and other types of literature; platform reading for entertainment; drills in interpretation in terms of conception of thought; declamation for various programs. Students must secure permission of the instructor before enrolling for this course. Assistant Professor Cortez.

Elective for Sophomores, Juniors, and Seniors. 3 recitations; 2½ semester credits.

COURSES PRIMARILY FOR JUNIORS

37, 38. Forum Discussion and Debate. First semester: the proposition and its main issues; sources and tests of evidence; construction of the argumentative brief; principle laws of reasoning; principle fallacies of reasoning; practice debates. Second semester: elements of parliamentary law and parliamentary debates; forum discussion and debate; "round table" discussion; court pleas; sales argument, etc. The subjects for research and debate will be selected from current events of state, national, and international importance. Assistant Professor Cortez.

Prerequisite: 37 prerequisite for 38. Elective for Juniors and Seniors (and for Sophomores by permission of the instructor). 3 recitations; 3 semester credits.

40. Stage Direction. This is a laboratory course in the fundamentals of acting, stage direction, and allied phases of play production. It is designed to fit the needs of prospective teachers, particularly teachers of English. Associate Professor Hennessy.

Prerequisite: the permission of the instructor. Elective for Sophomores, Juniors, and Seniors. 3 laboratory classes; 3 semester credits.

52. Introduction to Drama. This course is a comprehensive survey of dramatic literature from the Greek drama to the present. Associate Professor Hennessy.

Elective for Juniors, Seniors and graduate students. 3 lectures or recitations; 3 semester credits.

53, 54. Shakespeare's Plays. This course comprises a study of the major histories, comedies, and tragedies. Shakespeare is interpreted as poet and as dramatist. Associate Professor Hennessy.

Prerequisite: 53 prerequisite for 54. Elective for Juniors, Seniors, and graduate students. 3 lectures; 3 semester credits.

55. Milton. A detailed study of Milton's minor poetry and the *Paradise Lost*. Consideration is also given to the social, political and religious history of Milton's day. Professor Scudder.

Elective for Juniors, Seniors, and graduate students. 3 lectures; 3 semester credits.

57. The English Novel in the Eighteenth Century. The novel from Defoe through the Gothic Romance. There will be lectures and constant outside reading. Assistant Professor Schoedinger.

Elective for Juniors and Seniors, and graduate students. 3 lectures or recitations; 3 semester credits.

59. The English Novel in the Nineteenth Century. A study of the novel from Jane Austen to Thomas Hardy. There will be lectures, recitations, and constant reading. Professor Scudder.

Elective for Juniors, Seniors, and graduate students. 3 lectures or recitations; 3 semester credits. (Not given in 1937-38)

61, 62. The English Romantic Writers. A course dealing with the major writers of the early nineteenth century, such as Wordsworth, Coleridge, Byron, Lamb, Shelley, Hazlitt and Keats. Readings also from the work of many minor writers, especially those of the late eighteenth century. One hour of the week will be devoted to round-table discussion with small groups. Assistant Professor Towle.

Prerequisite: 61 prerequisite for 62. Elective for Juniors, Seniors, and graduate students. 2 lectures; 1 recitation; 3 semester credits.

63, 64. Advanced American Literature. A series of studies in special fields, the subjects to be announced. In 1937–38 the subjects are: The American Novel, and The American Short Story. Professor Scudder.

Elective for Juniors, Seniors, and graduate students. 3 lectures; 3 semester credits.

65, 66. Writing as an Art. A course in the study and practice of the forms of writing through an examination of the history of literary criticism. The reading of famous critical essays and of many contemporary opinions, correlated with practice writing of various types. Each student is allowed to spend much of his time with the type he finds most congenial. Collateral readings, with frequent class discussions and conferences. Assistant Professor Towle and Assistant Professor Webster.

Prerequisite: English 7. 65 prerequisite for 66. Elective for Juniors, Seniors, and graduate students. 2 lectures; 1 recitation; 3 semester credits.

COURSES PRIMARILY FOR SENIORS

67, 68. Chaucer. A study of Chaucer's life and times, and a reading of most of his poetry. In the first semester, lectures are given upon Old and Middle English grammar as an introduction to the language of Chaucer, and the longer minor poems are read. In the second semester, *Troilus and Cressida,* and *The Canterbury Tales* are read. Professor Richards.

Prerequisite: 67 prerequisite for 68. Elective for Seniors and graduate students. 3 lectures or recitations; 3 semester credits.

SERVICE COURSES

41, (41). Expository Writing. Practice in the writing of reports and other papers pertaining to technical subjects. The reports will take the form of recommendation reports, progress reports, and information reports. Other papers will take the form of term papers or short theses. In addition to these, there will be required the writing of business letters of various types, such as letters of application, of complaint, and of sales. Assistant Professor Webster.

Required of Seniors in Civil, Electrical, and Mechanical Engineering, and of Seniors in Agriculture. 2 lectures, conferences; 2 semester credits.

English–Education (Eng–Ed) 91. Problems in the Teaching of High School English. This course deals specifically with the selection and organization of subject-matter, with the most efficient methods of presenting this material, and with the problems which arise within the wide field of the teaching of high school English. Associate Professor Smith.

Prerequisite: three years of English courses. Required of students majoring in English who plan to teach English in secondary schools. Elective for students majoring in language, history, or education. 2 lectures; 1 laboratory; 3 semester credits.

ENTOMOLOGY

Walter C. O'Kane, *Professor*
James G. Conklin, *Instructor*

Note.—Work in the Department of Entomology is largely individualized. So far as possible each student is permitted to choose the topics to which he will give special attention. This applies to each course offered by the department. Laboratory work may be done at any time that the laboratory is open. Reference books are issued from the department library at any time. Lecture periods are occupied largely with discussion, in which students participate.

Professional Training.—The Department of Entomology is prepared to offer professional training in Entomology. For adequate training, a broad foundation as well as thorough specialization is necessary. To accomplish this the period of training should extend beyond undergraduate college work. Students who desire to specialize in Entomology are requested to consult the head of the department in order to plan an adequate and comprehensive sequence of studies.

1. Principles of Economic Entomology. The relation of the structure and classification of insects to methods of insect control. The preparation and application of insecticides. Studies of the life

history and control of insect pests. Professor O'Kane and Mr. Conklin.

Recommended elective for Freshmen in Agriculture. 2 lectures; 1 laboratory; 3 semester credits.

52. Insects of Orchard and Garden. The application of methods of insect control of typical injurious species. Studies of the life histories and habits of important insect pests of orchard, garden and certain field crops. Adapted especially for students in Horticulture and in General Agriculture. Professor O'Kane.

Prerequisite: Entomology 1. Elective for Juniors and Seniors. 1 lecture; 1 laboratory; 2 semester credits. (Given in alternate years; offered in 1937-38)

53. Insects of Domestic Animals. The insect enemies of domestic livestock; the life histories, habits and means of control. Adapted especially for students in Animal Husbandry. Professor O'Kane.

Prerequisite: Entomology 1. Elective for Juniors and Seniors. 1 lecture; 1 laboratory; 2 semester credits. (Given in alternate years; offered in 1938-39)

54. Household Insects. Medical Entomology. The life histories, habits and means of control of insects of the household and of stored products. The relation of insects to disease. Adapted especially for students in Home Economics. Professor O'Kane.

Required of Seniors in Institutional Management. Elective for Juniors and Seniors. 1 lecture; 1 laboratory; 2 semester credits.

56. Forest Insects. Studies of the life histories and habits of the more destructive forest insects and the means of their control. Adapted especially for students in Forestry. Professor O'Kane.

Prerequisite: Entomology 1. Recommended for Juniors in Forestry. Elective for others. 1 lecture; 1 laboratory; 2 semester credits.

57, 58. Advanced Entomology. Studies of the external morphology of insects, with special reference to the structures used in classification. Professor O'Kane and Mr. Conklin.

Prerequisite: 57 prerequisite for 58. Open to students only by permission of the head of the department. Required of students specializing in Entomology. 2 lectures; 2 laboratories; 4 semeter credits.

59, 60. Advanced Economic Entomology. Detailed studies of problems involved in applied entomology. The literature of economic entomology. Investigational methods. Practice in arranging projects. Studies in the specialized phases of entomology. Professor O'Kane and Mr. Conklin.

Open to students only by permission of head of department. Prerequisite: 59 prerequisite for 60. Required of students specializing in Entomology. Hours and credits to be arranged.

For courses primarily for graduate students see Catalog of the Graduate School.

FORESTRY

Karl W. Woodward, *Professor*
Clark L. Stevens, *Assistant Professor*
Lewis C. Swain, *Instructor*

2. Principles of Forestry. This course is intended to meet the needs of students who desire to obtain a general knowledge of the principles of forestry. The value of forests, their protection, their utilization, their improvement and regeneration, are discussed with special reference to New Hampshire conditions. Professor Woodward.

Recommended elective for Freshmen in Agriculture except those in Forestry. 2 lectures; 1 laboratory; 3 semester credits.

4. Principles of Forestry. The same as Forestry 2, except that no laboratory work is included. Professor Woodward.

Elective for any student. 2 lectures; 2 semester credits.

5, 6. Tree and Wood Identification. This course deals with the characteristics of our native tree species, and with the identification of trees in the field and from specimens. Additional practice in identifying northern species is given during Summer Camp.

A study is also made of the uses of lumber, the physical properties and the identification of the commercially important woods. Each student is required to provide himself with a hand lens. Mr. Swain.

Recommended elective for Freshmen in Forestry, elective for others. 2 lectures; 1 laboratory; 3 semester credits.

7, 8. Forest Mensuration. Includes practice in forest mapping; measurement of forest products; timber cruising; and studies of growth and yield of the commercial tree species of New England. The course is continued during Summer Camp. Each student is required to provide himself with a box compass. **Mr. Swain.**

Required of Juniors in Forestry. Elective for others, with approval of the instructor. 2 lectures; 1 laboratory; 3 semester credits.

9, 10. Silviculture. The art of producing and tending a forest. Includes seed collection, storage and testing; nursery practice; forest plantations; systems of natural regeneration; intermediate cuttings; forest protection, and discussion of silvicultural practice in the most important forest regions of the United States. Assistant Professor Stevens.

Required of Sophomores in Forestry. Elective for others, with approval of the instructor. Prerequisites: Forestry 5, 6. 2 lectures; 1 laboratory; 3 semester credits.

11, 12. Forest Utilization. Methods and costs of logging and milling in the chief lumber-producing regions of the United States; various types of forest products, their manufacture and marketing together with special problems of the lumber business. Emphasis is placed upon New England conditions. Attendance on instruction trips is required for credit in this course. Mr. Swain.

Required of certain Juniors in Forestry. Elective for others. 2 lectures; 1 laboratory; 3 semester credits.

13. Forest Improvements. Lectures on the methods of construction and the costs of the more important structures listed as improvements of the forest. Includes roads, trails, simple bridges, logging

railroads, telephone lines, flumes, slides, ranger cabins, lookout stations, etc. Mr. Swain.

Recommended elective for Juniors in Forestry. Elective for others, with approval of the instructor. 1 lecture; 1 laboratory; 2 semester credits.

14. Fish and Game Management. This is an introductory course designed to acquaint the student with the fundamental principles underlying the handling of wild life as a forest crop. Laboratory work consists of instruction trips to game farms, fish hatcheries, and the White Mountain National Forest. Attendance on these is required for credit in the course. Additional field work will be carried out during Summer Camp. Assistant Professor Stevens.

Recommended elective for Juniors in Forestry. Elective for others with approval of the instructor. 2 lectures; 2 semester credits.

15, 16. Thesis. Work to be arranged according to the needs of individual students. Professor Woodward and Assistant Professor Stevens.

Prerequisites: Forestry 5, 6; 7, 8, and 9, 10. Required of certain Juniors and Seniors in Forestry. 2 lectures; 2 to 3 semester credits.

17. National Forest Administration. The principles and methods employed in the national forests. Professor Woodward.

Prerequisites: Forestry 5, 6; 7, 8 and 9, 10. Recommended elective for Seniors. 3 lectures; 3 semester credits.

18. History of Forestry. The history of forestry, its development and present status in different countries; the work of the Federal Government and its management of the national forests; state forest policies; the lumber industry in the United States. Lectures and special readings. Professor Woodward.

Required of certain Seniors in Forestry. Elective for others with approval of the instructor. 3 lectures; 3 semester credits.

19, 20. Forest Management. The management of woodlots and large forest tracts for the purpose of gaining the largest immediate

and future returns; and the preparation of working plans to coordinate the protection, improvement, and regeneration of forests so as to make them yield the highest net returns. Professor Woodward.

Prerequisites: Forestry 5, 6; 7, 8; 9, 10; 11, 12. Required of Seniors in Forestry. 2 lectures; 2 laboratories; 4 semester credits.

22. Summer Camp. An eight weeks' course at the Swift River Camp, Passaconaway, N. H. Lectures and field work on the following projects: a forest survey of a large area of the White Mountain National Forest; silvical studies of the northern forest types; fish and game in the national forests; dendrology. This is an opportunity for instruction by officers of the U. S. Forest Service, and from three to six days are spent under their supervision on such work as fighting forest fires, building trails, telephone lines, etc. Each student is required to act as cook for a part of the course, and the details of running the camp and directing the survey are handled by the students as part of the instruction. Assistant Professor Stevens.

Required of Juniors in Forestry. Prerequisites: Forestry 7, 8; 9, 10, and C.E. 7, 8. 8 semester credits.

GEOLOGY

George W. White, *Associate Professor*
Theodore Ralph Meyers, *Assistant Professor*
Donald H. Chapman, *Assistant Professor*

The courses in geology are designed to give the student a general insight into the materials, structure, and history of the earth upon which he lives. They are intended for the student with broad general interests, who wishes some insight into earth science, as well as for the student who is looking forward to professional or graduate work in geology. The courses are non-technical, in the sense that they do not fit a student to enter the career of professional geology without further training.

Two major programs are suggested. The first is for the student who is seeking a broad cultural training, and should include Princi-

ples of Geology, Elementary Chemistry, and any four courses in geology for major work. The second program includes, besides geology courses, certain other courses which the student will find desirable as a prerequisite for graduate or professional work. Courses which should be included in this pre-professional program are Principles of Geology, Physiographic and Structural Geology, Mineralogy, Economic Geology, Paleontology, Field Problems, Inorganic Chemistry, Physics, Surveying, Engineering Drawing (M.E. 1, 2), Mathematics, and German.

1, 2. Principles of Geology. The study of the earth and its history. A consideration of the forces that have operated to produce land forms and structures, and a discussion of the materials of the earth's crust. These facts will then be applied to the interpretation of past geologic events, together with their effect on the development of life forms. Laboratory study of various land forms of the United States by means of maps; of common minerals and rocks of the earth's crust; and of the more common fossils, will closely parallel the class work. Occasional field trips are taken to nearby points of geologic interest. Associate Professor White, Assistant Professor Meyers, and Assistant Professor Chapman.

Prerequisite: 1 prerequisite for 2. Freshman and Sophomore course. 3 lectures or recitations; 1 laboratory; 4 semester credits.

3. Geography of the World. A course designed for the student interested in learning the essential geographic facts regarding the earth. The earth as a planet and the processes which are at work modifying the appearance of its surface are first briefly discussed. The continents are next considered one by one, with emphasis placed on their physical aspects. Finally, the climates of the world are briefly treated. Assistant Professor Chapman.

This course cannot be used to fill science requirements. Freshman course. 3 lectures or recitations; 3 semester credits.

4. Geography of North America. A course intended for the student who is interested more particularly in the North American Continent and its physical aspects. A brief treatment of the weather and

climate of the continent is followed by a discussion of the countries, treated regionally. This course concludes with a more intensive study of the physical geography of New England. Assistant Professor Chapman.

This course cannot be used to fill science requirements.
Prerequisite: Geology 3, or special permission. Freshman course. 3 lectures or recitations; 3 semester credits.

11. Physiography. Attention in this course is directed toward the forces which have been at work in producing the present aspect of the land surface, and particularly that of New England. Special emphasis is given to the work of running water, glaciers, and marine agents. Field trips are taken during the fall season to points easily reached from Durham. Assistant Professor Chapman.

Prerequisite: Geology 2. Sophomore course. 3 lectures or recitations; 1 laboratory; 4 semester credits.

12. Structural Geology. An advanced study of the structures of the earth's crust and of the dynamics of their formation. Included is discussion of mountain systems, metamorphism, and igneous structures, and of the theories of earth origin. Associate Professor White.

Prerequisite: One course in Geology. Sophomore course. 3 lectures or recitations; 1 laboratory; 4 semester credits.

51, 52. Mineralogy. A study of the minerals that make up the earth's crust. A study of crystals, by means of models and specimens showing well defined crystals, will be followed by a study of minerals and their determination by means of physical characteristics; and in addition, the aggregation of minerals to form rocks. Associate Professor White.

Prerequisite: One course in Geology and one course in Chemistry. 51 prerequisite for 52. 2 lectures or recitations; 1 laboratory; 3 semester credits.

53, 54. Economic Geology. A discussion of the metals, their ores, and their occurrence; the types of coal and their occurrence in the

coal fields of the United States; petroleum, the structures in which it is found, and the distribution of the oil fields, especially those of the United States. Lime, cement, building stones and related products will be treated briefly. Assistant Professor Meyers.

Prerequisite: One year's work in Geology. 3 lectures or recitations; 3 semester credits. (Given in alternate years; not offered in 1937-38)

55, 56. Paleontology. A study of the history, development, and morphology of the various groups of plants and animals as recorded by fossils found in the rocks of the earth's crust. More attention will be given to the development of animals than to plants. Assistant Professor Meyers.

Prerequisite: One year's work in Geology or Zoölogy. 55 prerequisite for 56. 2 lectures or recitations; 1 laboratory; 3 semester credits. (Given in alternate years; offered in 1937-38)

57, 58. Geologic Problems. A study of special problems by means of conferences, assigned readings and field work. The work will be fitted to the needs of the individual students. Associate Professor White, Assistant Professor Meyers, and Assistant Professor Chapman.

Prerequisite: Permission of the instructor. Credits to be arranged.

SERVICE COURSE

7, (7). General Geology. A general introductory course in physical geology, in which the structures and materials of the earth's crust are discussed, together with the forces which have produced and altered them. Assistant Professor Meyers.

Required of Freshmen in Chemistry, and Juniors in Civil Engineering. Elective for other students in Technology and for students in Agriculture. Open to Liberal Arts students by permission only. 3 lectures or recitations; 3 semester credits.

HISTORY

Donald C. Babcock, *Professor*
Arthur W. Jones, *Assistant Professor*
Allan B. Partridge, *Assistant Professor*
Philip M. Marston, *Assistant Professor*
Gibson R. Johnson, *Assistant Professor*
William Yale, *Assistant Professor*
Edna Dickey, *Assistant*

A. Monroe Stowe, *Professor* (*History-Education*)

In the courses in history an important place is given to historical reading carried on in the reference room. Oftentimes a considerable part of the work is written.

The statements as to prerequisites, etc., below are for Liberal Arts students. Agriculture and Technology students should consult the head of the department.

Any department in the College of Liberal Arts, except Geology, Home Economics, Physical Education for Women, and Zoölogy, may be considered as a related department. Students majoring in history are required to take History 55, 56 and 57, 58 before graduation.

COURSES FOR FRESHMEN

The following subject constitutes a basic course, required of all students in the College of Liberal Arts.

1 (1), 2 (2). Introduction to Contemporary Civilization. This course is designed to give the student a background which will enable him to understand the problems of human society rather than the record of specific historic events. It therefore takes up prehistoric as well as historic social evolution. It aims at the historic explanation of how modern life has come to be what it is, and an appreciation of the problems of contemporary society. Professor Babcock, Assistant Professor Marston, Assistant Professor Johnson, Assistant Professor Yale, Assistant Professor Partridge, Assistant Professor Jones, Miss Dickey.

Prerequisite: 1 prerequisite for 2. 4 lectures or recitations; 4 semester credits.

3, 4. Modern European History. This course is intended to supplement the Freshmen students' general knowledge of European his-

tory, taking up the history of modern Europe, European states, and the expansive development from about 1500 to 1914. Assistant Professor Jones.

Open only to Freshmen. 3 lectures or recitations; 3 semester credits.

COURSES FOR UPPERCLASSMEN

GROUP I

5, 6. Colonial and Revolutionary American History. A study of colonial beginnings in America, national rivalries, the English colonies, the Revolution, and our national life to 1789. Assistant Professor Marston.

Prerequisite: 5 prerequisite for 6. Elective for Juniors and Seniors, and for Sophomores who are taking 7 or 8. 3 lectures or recitations; 3 semester credits.

7, 8. The United States since 1789. Beginning with the administration of Washington, the great forces of nationalism, expansion, sectionalism, and democracy are traced up to the present time, with reference to as many aspects of our national life as possible, including literary, artistic, scientific, and everyday life-ways, as well as the more usual political and economic events. Professor Babcock.

Prerequisite: 7 prerequisite for 8. Elective for Sophomores, Juniors, and Seniors. 4 lectures or recitations; 4 semester credits.

9, 10. Latin-American History. The purpose of the course is three-fold: (1) to trace the development and influence of Spanish and Portuguese culture as a wide-spread world force; (2) to see what the history of the Latin-American peoples has been; (3) to relate Latin-America to North America, particularly in view of recent growth in friendly relations.

Elective for Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

GROUP II

11. The Ancient Orient. A study of pre-literary culture in the Near East, followed by a consideration of the contributions made in Egypt, Babylonia, Assyria, Chaldea, Palestine, and Persia to civilization prior to the rise of Greece. Assistant Professor Partridge.

Elective for Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

12. History of Greece. An examination of all features of Greek culture and its influence, including adequate attention to the Hellenistic period after the death of Alexander the Great. Assistant Professor Partridge.

Elective for Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

13, 14. History of Rome. In the first semester, the pre-literary foundations and legendary origins are studied, followed by an analysis of republican life and institutions to the first century B.C. In the second semester, a study is made of the transition from republic to principate and concludes with the account of the later Roman Empire to the time of Justinian in 565. Assistant Professor Partridge.

Elective for Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits. (Not offered in 1937-38)

15, 16. Medieval History. This survey of the pageant of the Middle Ages begins with the death of Justinian and goes as far as the first crusade in the first semester. The second semester's work carries the student into the 14th century. Assistant Professor Jones.

Prerequisite: 15 prerequisite for 16. Elective for Juniors and Seniors, and for Sophomores by permission. 3 lectures or recitations; 3 semester credits.

17, 18. The Period of the Renaissance. The Renaissance as a regathering of past values and as a forward movement introducing the Modern Period. Assistant Professor Jones.

Prerequisite: 17 prerequisite for 18. Elective for Juniors and Seniors, and for Sophomores by permission. 3 lectures or recitations; 3 semester credits. (Not offered in 1937-38)

19, 20. Modern European History. This course takes up the history of the modern European states and of Europe as a whole in its expansive development and world leadership from about 1500 to 1914. Eastern Europe and Asia and Africa are studied as backgrounds for the colonial history of modern times. Assistant Professor Jones.

Elective for Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits. (Students who have received credit for History 3, 4 cannot receive credit for 19, 20)

21, 22. History of England. A general survey of the history of the British Isles from the time of their discovery to contemporary developments. Attention in the first semester is given chiefly to Anglo-Saxon, Norman, and later medieval times, and to the opening of the modern period, through the reign of Queen Mary Tudor. The second semester begins with the study of the Age of Elizabeth and concludes with an examination of the contemporary history of the British Commonwealth of Nations. Assistant Professor Partridge.

Elective for Juniors and Seniors, and for Sophomores by permission. 3 lectures or recitations; 3 semester credits.

23, 24. Historical Origins and Development of Christianity. An historical survey is made of the life, literature, religion and social development of the Old Testament as a culture background. This is followed by an investigation of the historic data existing about the life, character and teaching of Jesus. The growth and expansion of the Christian movement is traced. The course is designed to furnish students an opportunity to investigate and evaluate their own religious heritage in the light of Contemporary thought, and to make a special study of any particular intellectual problems they may have in this field.

Open to Sophomores, Juniors and Seniors. 3 lectures or discusions; 3 semester credits. (Not offered in 1937-38)

25, 26. History of Religions. A study of religion as an historic force in society. The nature of religion, its origins, and early development are treated in connection with primitive social history.

This is followed by a study of the principal religions of the world, special attention being given to Hinduism, Buddhism, Zoroastrianism, Confucianism and Mohammedanism. The history, literature, and philosophy of the oriental civilizations and cultures are investigated as a background for understanding these religions. Assistant Professor Johnson.

Open to Sophomores, Juniors, and Seniors. 3 lectures or discussions; 3 semester credits.

51, 52. Recent World History. An historical introduction to the post-war period with a study of its most outstanding historical developments based on study of the World War, its causes, its progress, and its settlement, showing how these are connected with historic developments since 1919. Assistant Professor Yale.

Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits; section 2. Also a special section (section 1) elective by permission of the instructor. 4 lectures or recitations; 4 semester credits.

53, 54. The History of Civilization. This course is designed to show the close connections between the historical development of western society in both Europe and North America and their educational institutions. It traces the early development of educational institutions in the Ancient Orient, Greece, and Rome, through the Dark and Middle Ages down to modern times. It connects the development of modern educational systems in Europe and the United States with nineteenth and twentieth century developments. Assistant Professor Yale.

Elective for Seniors. 3 lectures or recitations; 3 semester credits.

55, 56. The Interpretation of History. An investigation of some of the ways in which thoughtful persons have viewed the historic process as a whole. The aim is the interpretation of life; the method is to combine philosophy, sociology, and history, with emphasis on the latter. Professor Babcock.

Required of students majoring in History. Elective for Juniors and Seniors on consultation with the instructor. 3 lectures or discussions; 3 semester credits. (Not offered in 1937-38)

57, 58. Historiography. A study of the lives and writings of some of the leading historians from earliest times to the present, with the motive of learning what their contributions were to the scope, method, viewpoint, and literary achievement in the historical field. Assistant Professor Partridge.

Required of students majoring in History. Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

History–Education (Hist–Ed) 91. Problems in the Teaching of High School History. This course includes a study of the purposes and objectives of teaching high school history, of the selection and organization of teaching material, and of teaching and testing techniques which may be advantageously used in teaching high school history. The course will include experiments in studying and teaching recent American history. Professor Stowe.

Open to students who have satisfactorily completed History 7, 8, Political Science 1, 2, Economics 1, 2 or 3, 4, and Education 61. 3 class meetings; 3 semester credits.

HOME ECONOMICS

Helen F. McLaughlin, *Professor*
Irma G. Bowen, *Assistant Professor*
Helen W. Leighton, *Instructor*
Marion Stolworthy, *Instructor*
Dorothy Mummery, *Instructor*
Constance LaBagh, *Instructor*
Elizabeth Fernald, *Assistant*

Students majoring in Home Economics must take Home Economics 1 and 2 before graduation.

1, 2. Homemaking. A brief consideration of the various phases of homemaking and the vocational opportunities open to women. Professor McLaughlin and other staff members.

Basic course for students majoring in Home Economics. Elective for other students. 3 lectures or demonstrations; 3 semester credits.

CLOTHING AND TEXTILES

3, 4. CLOTHING SELECTION. Problems in the selection of suitable and becoming clothing. A study of textile materials from the point of view of the consumer. Care and renovation of clothing. Assistant Professor Bowen and Miss LaBagh.

3 lectures or recitations; 3 semester credits.

5, 6. CLOTHING CONSTRUCTION. Application of the principles of design and development of technique in garment construction. Assistant Professor Bowen and Miss LaBagh.

2 laboratories; 2 semester credits.

7, 8. HISTORIC COSTUME AND DESIGN. The study of costume changes from the primitive to the present, together with something of the historical events that influenced such changes. Adaptation of period costume to modern use. Assistant Professor Bowen.

First semester: 3 lectures or recitations; 3 semester credits. Second semester: 1 lecture; 2 laboratories; 1–3 semester credits.

9, 10. APPLIED DESIGN. The basic principles of design and color applied to simple hand crafts, table decorations, and favors. Students retaining finished products pay for the cost of materials used. Assistant Professor Bowen and Mrs. Stolworthy.

1 lecture or recitation; 1 or 2 laboratories; 2 or 3 semester credits.

FOOD AND NUTRITION

15, 16. FOODS. A study of the nutritive values, healthful preservation and preparation, and the attractive and efficient serving of foods. Mrs. Stolworthy.

Prerequisite: 15 prerequisite for 16. 2 lectures, 2 laboratories; 3 semester credits.

17, 18. ADVANCED FOODS. An advanced study of problems concerning the selection and preparation of foods, culminating in the actual solution of individual experimental problems. In the first semester experimental projects are taken up; in the second semester, tea room management. Mrs. Stolworthy.

Prerequisite: H. E. 15. 16. 17 prerequisite for 18. First semester: 1 lecture; 1 laboratory; 2 semester credits. Second semester: 2 laboratories; 2 semester credits.

19. Nutrition. A reading course in the current literature of nutrition. Professor McLaughlin.

1 conference; 5 hours outside reading; 2 semester credits.

20. Dietetics. Application of the principles of human nutrition to varying physiological, social, and economic conditions. Professor McLaughlin and Mrs. Stolworthy.

2 lectures; 1 laboratory; 3 semester credits.

21. Camp Cookery. A study of cookery especially adapted to camp life. Professor McLaughlin.

Elective for Forestry students. 1 lecture-recitation; 1 laboratory; 1 semester credit (first ten weeks of semester).

CHILD DEVELOPMENT

25, (25). Child Development. A study of the development of the young child, his environment, and methods of child guidance. Miss Mummery.

Prerequisite or parallel requirement: Education 41, or Psychology 51. 2 lectures or discussions; laboratory work with children at the Nursery School-Kindergarten; reference reading; 3 semester credits.

27, (27). Projects in Child Development. A study of the problems which arise in the guidance of young children. Class discussions will be based upon the special interests of the students enrolled. Miss Mummery.

Prerequisite: H.E. 25. 2 lectures or discussions; laboratory in the Nursery School-Kindergarten; reference reading; 2-3 semester credits.

HOME MANAGEMENT

31, 32. HOME BUILDING AND FURNISHING. The evolution of American housing from the time of the early settlers to the present. Study and discussion of problems pertaining to the selection of a site, the planning, decorating and furnishing of a modern home. Assistant Professor Bowen.

Prerequisite: 31 prerequisite for 32. 3 lectures or recitations; 3 semester credits.

34. HOME MANAGEMENT. A study of the organization of the household as a home, and of the principles involved in its management. Miss LaBagh.

2 lectures; 2 semester credits.

35, (35). HOME MANAGEMENT HOUSE. Practice in homemaking; managerial and dietetic problems; nine weeks' residence in the Home Management House (two groups each semester). Miss LaBagh.

Required of all Vocational Home Economics majors; elective for other students by permission of the head of the department. Class limited to eight. 3 semester credits.

37. HOME CARE OF THE SICK AND FIRST AID. Emergency treatment of minor injuries and care of the sick at home. Red Cross certificate given to those taking and passing Red Cross examinations. Mrs. Stolworthy.

2 lectures or recitations; 1 hour laboratory; 2 semester credits.

INSTITUTIONAL MANAGEMENT

41. INSTITUTIONAL MANAGEMENT. A study of the organization, equipment, and management of typical institutions; and of the buying, planning, preparing and serving of meals for large groups. Field trips to study equipment and management of institutions are included in the course. Mrs. Leighton.

3 lectures or recitations; 3 semester credits.

43, 44. Institutional Practice. Practical experience in the kitchens and serving rooms of the University Commons. Mrs. Leighton.

Prerequisite: 43 prerequisite for 44. 2 laboratories; 2 semester credits.

HOME ECONOMICS EDUCATION

47, (47). Projects in Home Economics. This course provides opportunity for students to work out projects supplementary to or in advance of other courses. Members of Home Economics staff.

Conferences and assignments; reference readings; 1–3 semester credits.

Home Economics Education (HE-Ed) 91. Problems in the Teaching of High School Home Economics. Professor McLaughlin and other staff members.

3 lectures or recitations; 3 semester credits.

Home Economics Education (HE-Ed) 94. Supervised Teaching in High School Home Economics. Professor McLaughlin.

12 weeks supervised teaching; 10 semester credits.

Home Economics Education (HE-Ed) 96. Seminar in the Teaching of High School Home Economics. Professor McLaughlin and other staff members.

Required of all students who have done supervised teaching. 6 weeks intensive work following period of supervised teaching. 2 semester credits.

HORTICULTURE

George F. Potter, *Professor*
J. Raymond Hepler, *Associate Professor*
L. Phelps Latimer, *Assistant Professor*
James Macfarlane, *Instructor*
Henry S. Clapp, *Instructor*

1. Harvesting and Marketing of Fruits. The handling of fruit crops, technicalities of fruit grading, agencies used and problems met in storing, transporting and merchandising the crop, with laboratory practice in packing-house work. Professor Potter.

Elective for any student. 2 lectures; 1 laboratory; 3 semester credits.

2. Elementary Pomology—Orchard and Small Fruits. A brief consideration of the principles and practice involved in orcharding and in the culture of the most important of the small fruits. Professor Potter.

Recommended elective for Freshmen in Agriculture. 2 lectures; 1 laboratory; 3 semester credits.

3. Fruit Judging. A study of the fruit characters and commercial characteristics of the leading varieties of fruits with special reference to those important in New England. The student is required to become proficient in recognizing varieties, in determining causes of various blemishes, and in judging exhibition fruit. Assistant Professor Latimer.

Elective for any student. 2 laboratories; 2 semester credits.

13. Vegetable Forcing. A study of special vegetables as grown under glass. Emphasis is placed upon the commercial phases of the work, including varieties, culture, and marketing. Each student is required to grow crops from seeding to maturity. Associate Professor Hepler.

Elective for any student. 2 lectures; 1 laboratory; 3 semester credits.

14. Vegetable Gardening. A study of garden soils, testing, and planting seeds, selection of varieties with reference to New Hamp-

shire conditions, construction and management of hotbeds and cold frames, and the fertilization, cultivation, and irrigation of the garden. Associate Professor Hepler.

Recommended elective for Freshmen in Agriculture. 2 lectures; 1 laboratory; 3 semester credits.

26. Ornamental Woody Plants in Spring. A study of woody plants used for landscape purposes in New Hampshire and northern New England as they appear in spring and summer. Mr. Clapp.

Required of Horticulture students who do not elect Horticulture 55 or 65. Elective for any other student. 2 lectures; 1 laboratory; 3 semester credits.

27. Ornamental Woody Plants in Autumn. The identification of ornamental woody plants for landscape use in New Hampshire and northern New England. The characteristics of the plants in fall and early winter are particularly noted. Mr. Clapp.

Required of Horticulture students who do not elect Horticulture 55 or 65. Elective for other Sophomores, Juniors, or Seniors. Preferably preceded by Horticulture 26. 1 lecture; 2 laboratories; 3 semester credits.

28. Elementary Landscape Design. A study of the principles involved in ornamental and landscape gardening. Special attention is given to beautifying the home surroundings. Mr. Clapp.

Elective for any student. 2 lectures; 1 laboratory; 3 semester credits.

38. Floral Design. This course is arranged to instruct in the principles and theories of floral design and the use of flowers in the home. To a limited extent, a survey is made of the use of flowers at public functions held in halls and churches. Participation in the actual practice of floral arrangement will be required of each student. Mr. Clapp.

Elective for any student. Registration by permission of the instructor. 1 laboratory; 1 semester credit.

39. Greenhouse Construction and Management. This course treats of modern methods of greenhouse work and the more important

plants grown commercially under glass. Varieties, culture, marketing, and enemies of greenhouse plants are studied. Each student is required to do practical work in propagating, potting, watering plants and ventilating greenhouses. A study is made of the history and development of different types of greenhouses, including methods of heating and general management. Mr. Macfarlane.

Elective for any student. 2 lectures; 1 laboratory; 3 semester credits.

40. Outdoor Floriculture. A study of the art of growing flowers both indoors and in the garden. It includes the classification and culture of foliage and flowering plants for indoor use, and of flowering annuals, herbaceous perennials, bulbs and bedding plants for the outdoor garden. Lecture and laboratory work is supplemented by field trips. Mr. Macfarlane.

Elective for any student. 2 lectures; 1 laboratory; 3 semester credits.

41, 42. Advanced Horticulture. Subject-matter in any phase of horticulture (with laboratory practice if desirable) to meet the needs of special students or groups of students may be taken by arrangement with the head of the department. Professor Potter and staff.

Elective for Juniors and Seniors. Students must obtain permission to register from the head of the department. Hours and credits to be arranged.

44. Advanced Pomology Laboratory. Seasonal practice work in fruit-growing including such operations as pruning, grafting, planting, and spraying, or similar practice in growing vegetables or ornamental plants. Students are expected to spend two half-days each week in the orchard, garden or greenhouses, and will meet for one hour to discuss fundamental principles involved. Professor Potter.

Prerequisite: Horticulture 2, 14 or 40. Elective for any student. 1 lecture; 4 laboratories; 5 semester credits.

48, 49. Beekeeping. The second semester course should preferably precede the first. It comprises a study of the life history and habits of honey bees and their adaptation to apiary conditions.

The laboratory work includes the assembling and use of hives and hive fittings, and practice in handling bees. In the first semester attention is given to the principles and methods underlying the production of commercial crops of comb and extracted honey, with laboratory practice in the care and protection of bees during the fall and winter, the extraction of honey and the preparation for market of extracted honey, comb honey, and wax. Associate Professor Hepler.

Elective for any student. 1 lecture; 1 laboratory; 2 semester credits.

54. Advanced Pomology: Orchard and Small Fruits. A detailed study of fundamental principles and experimental data and their application to orchard problems such as growth and rest period in fruit plants, water requirements, soil management, pruning, fruit bud formation, fruit setting, pollination, thinning, winter injury and the quality and keeping period of fruits in storage. Assistant Professor Latimer.

Prerequisite: Botany 1, 2 and Horticulture 2. Elective for Juniors and Seniors. 2 lectures; 2 semester credits.

55. Systematic Survey of Fruits. The important species of fruits and nuts of temperate regions and their botanical relationships are studied. The student is expected to become familiar with the history, distribution, and merits of each species, and the horticultural varieties developed from it. Assistant Professor Latimer.

Prerequisites: Botany 1, 2 and Horticulture 2. Elective for Juniors and Seniors. Required of Seniors in Horticulture who have not taken Horticulture 65 or Horticulture 26, 27. 2 lectures; 2 semester credits. (Given in alternate years; offered in 1938-39).

65. Advanced Vegetable Gardening. This course deals with the management of commercial vegetable gardens. It also includes a systematic study of the species and varieties of the more important families of vegetables. Associate Professor Hepler.

Prerequisite: Horticulture 14. Required of Horticulture students who do not elect Horticulture 55 or Horti-

culture 26 and 27. Elective for Juniors and Seniors. 2 lectures; 1 laboratory; 3 semester credits.

91, 92. Horticultural Seminar. A review of recent horticultural literature and methods of investigational work. Each student is required to prepare and present a term paper on some horticultural topic. Professor Potter and staff.

Required of Seniors in Horticulture. Other students must obtain permission to enroll. 2 lectures; 2 semester credits.

94. Evolution and Improvement of Plants. The application of the principles of genetics to agricultural plant-breeding. Hybridization and selection are studied as means of improving horticultural varieties of plants. Professor Potter.

Prerequisite: Zoölogy 49. Elective for any student. 2 lectures; 2 semester credits. (Given in alternate years; offered in 1938-39)

LANGUAGES

Clifford S. Parker, *Professor*
John S. Walsh, *Associate Professor*
Rudolf L. Hering, *Assistant Professor*
Julio Berzunza, *Assistant Professor*
Paul P. Grigaut, *Assistant Professor*
John A. Floyd, *Instructor*
James T. Schoolcraft, Jr., *Instructor*
Terrence J. Rafferty, *Assistant*
Madeleine A. Cournoyer, *Assistant*

Courses 1, 2 and 3, 4 in French, German, and Spanish are planned particularly to help students acquire a reading knowledge of the respective language and thus enable them (1) to pass the reading test described on page 98 of the catalog, and (2) to utilize the language as an asset in other fields of learning and along many vocational lines.

The advanced courses have two main objectives: (1) to prepare students to become teachers of French, German, Latin, or Spanish in

secondary schools; (2) to give all students a valuable acquaintance with the language, literature, and civilization of foreign countries in ancient and modern times.

For special requirements expected of majors in languages, students should consult the head of the department.

All students are cordially invited to attend the weekly meetings of the French Club for practice in conversational French.

FRENCH

(Freshmen will be assigned to French 1, French 3, or French 5, on the basis of their performance in the French Placement Examination in Freshman Week.)

PROFESSOR PARKER, ASSISTANT PROFESSOR GRIGAUT, MR. FLOYD, MR. RAFFERTY, MISS COURNOYER

1, 2. ELEMENTARY FRENCH. Elements of French grammar, reading of simple prose, oral practice, dictation. The course will be sectioned for those entering with credit and without credit in high school French.

Prerequisite: 1 prerequisite for 2. 5 recitations; 4 semester credits.

3, 4. INTERMEDIATE FRENCH. Reading and translation, review of grammar, oral practice, composition.

Prerequisite: French 2 or its equivalent. 3 prerequisite for 4. 3 recitations; 3 semester credits.

5, 6. MASTERPIECES OF FRENCH LITERATURE. Prose and poetry of some of the most important writers of the seventeenth, eighteenth and nineteenth centuries; history of French civilization; composition and oral practice.

Prerequisite: French 4. 5 prerequisite for 6. 3 recitations; 3 semester credits.

13, 14. FRENCH COMPOSITION AND CONVERSATION. The use of written and spoken French is taught by careful attention to pronunciation, composition and grammar.

This course is especially valuable for students who wish to teach French and conduct French clubs. Such students will have an opportunity to coöperate with the instructor in the preparation and pres-

entation of French plays. This course should be taken by every student desiring to obtain departmental recommendation for the teaching of French. Enrollment is limited to twenty students per section. Permission of the instructor or of the head of the department is required before enrollment.

Prerequisite: French 4 with grade of 75 or better; or French 6. 13 prerequisite for 14. 3 recitations; 3 semester credits.

11, 12. FRENCH CLASSICISM. This course, covering the period from 1600 to 1750, will trace the rise and development of the classical ideal in French literature, study the masterpieces of the great writers of the age of Louis XIV, and examine the decline and disintegration of classicism in the 18th century.

Prerequisite: French 6. 11 prerequisite for 12. 3 recitations; 3 semester credits.

53, 54. FRENCH ROMANTICISM. This course, covering the period from 1750 to 1850, will begin with a study of J. J. Rousseau's work and influence, continuing with the important writers of the Romantic school in the 19th cenutry, and analyze the intermingling of Romanticism and Realism in the work of Balzac.

Prerequisite: French 12. 53 prerequisite for 54. 3 recitations; 3 semester credits.

57, 58. FRENCH LITERATURE FROM 1850 TO THE PRESENT. This course will study Realism and Naturalism in the novel and drama, the Parnassian and Symbolist schools in poetry, the psychological novels of Bourget, and the various schools and trends of the late 19th and early 20th centuries. Conducted largely in French.

Prerequisite: French 12 or 54. 57 prerequisite for 58. 3 recitations; 3 semester credits.

61, 62. FRENCH GRAMMAR. This course, intended primarily for those who intend to teach French, will be devoted to a systematic study of French grammar in all its phases from elementary to highly advanced.

Prerequisite: Permission of the instructor or of the head of the department. Permission will be granted only to

Juniors, Seniors, and graduate students. 61 prerequisite for 62. 3 recitations; 3 semester credits.

63, 64. FRENCH LITERATURE AND CIVILIZATION OF THE MIDDLE AGES AND THE RENAISSANCE. A study of the various forms and masterpieces of French literature from the beginning to the year 1600, with consideration of their historical and social background. Lectures, extensive reading, reports, and recitations. Recommended for Seniors and graduate students.

Prerequisite: French 12 or 54. 63 prerequisite for 64. 2 lectures; 2 semester credits.

71, 72. STUDIES IN MODERN FRENCH LITERATURE. This course will take up several of the greatest French writers from 1600 to 1900 for a detailed and comprehensive study of their work. The choice of writers to be studied in a given year will depend upon the needs or tastes of the students electing the course. The work will be conducted largely in French.

Prerequisite: Senior or graduate standing. 71 prerequisite for 72. 3 recitations; 3 semester credits.

FRENCH–EDUCATION (FR–ED) 91. PROBLEMS IN THE TEACHING OF FRENCH IN THE HIGH SCHOOL. This course will study the special objectives, methods, and problems of high school French. It is open only to Seniors and graduate students who are planning to teach. Visits to schools to observe the work of experienced teachers will be arranged. Students in this course may be given an opportunity to assist in the work of French 1, 2.

Prerequisite: Permission of the head of the department. 3 recitations; 3 semester credits.

GERMAN

PROFESSOR PARKER, ASSISTANT PROFESSOR HERING, MR. SCHOOLCRAFT

1, 2. ELEMENTARY GERMAN. Pronunciation, grammar, word building, reading of easy prose, composition, conversation, dictation, memory work.

Prerequisite: 1 prerequisite for 2. 3 recitations; 3 semester credits.

3, 4. Intermediate German. German syntax, reading of from 150 to 200 pages in class and about 300 pages of outside reading, composition, dictation, word-building, and conversation.

Prerequisite: German 2 or two years of high school German. 3 prerequisite for 4. 3 recitations; 3 semester credits.

5, 6. Scientific German. This course is primarily for students in the scientific, pre-medical, and technological curricula. The aim is to give students the ability to read scientific German and to translate very accurately.

Prerequisite: German 2 or two years of high school German. 5 prerequisite for 6. 3 recitations; 3 semester credits.

7, 8. Modern German Fiction and Drama. The different movements in German literature of the nineteenth and twentieth centuries, compared with those of the preceding century. The influence of Lessing, Schiller, and Goethe on the drama. The development of the drama from classicism to naturalism. Course to be conducted mainly in German. Written themes in German, outside reading and reports, oral discussions.

Prerequisite: German 4. 7 prerequisite for 8. 3 recitations; 3 semester credits. (Given in alternate years; not offered in 1937-38).

11, 12. German Literature of the Eighteenth and Nineteenth Centuries. A study of the structure of the drama of the classic period is the chief aim of this course. The plays of Lessing, Schiller, Goethe and Hebbel will be studied either in class or as outside reading.

Prerequisite: German 4. 11 prerequisite for 12. 3 recitations; 3 semester credits. (Given in alternate years; offered in 1937-38).

13, 14. Conversation and Composition. The aim of this course is to give students the ability to converse on everyday topics and to express themselves easily in writing. The work will be conducted in German.

Prerequisite: German 4. 13 prerequisite for 14. 3 recitations; 3 semester credits.

51, 52. GERMAN LITERATURE. A survey of German literature. Readings, themes and reports on outside readings. Lectures and quizzes.

Prerequisite: Three years of college German or equivalent. 51 prerequisite for 52. 3 recitations; 3 semester credits. (Given in alternate years; offered in 1937-38)

55, 56. DEUTSCHKUNDE. The history of German civilization.

Prerequisite: Three years of college German or equivalent. 55 prerequisite for 56. 3 recitations; 3 semester credits. (Given in alternate years; not offered in 1937-38)

GREEK

ASSOCIATE PROFESSOR WALSH

1, 2. ELEMENTARY GREEK. Grammar, composition, translation. (Given every third year; not offered in 1937-38.)

Prerequisite: Permission of the instructor. 1 prerequisite for 2. 3 recitations; 3 semester credits.

LATIN

ASSOCIATE PROFESSOR WALSH

3, 4. ADVANCED LATIN. This course will be devoted to the improvement of the student's ability to read Latin prose and poetry. The first part of the year will be given over to a concentrated review of grammar and vocabulary. Work on unseen passages and prepared lessons in prose authors will occupy the rest of the year.

Prerequisite: Two years of high school Latin. 3 prerequisite for 4. 3 recitations; 3 semester credits.

5, 6. LATIN POETRY. Study of selected poems of Catullus, Ovid, Phaedrus, Martial and the odes and epodes of Horace. Translations,

lectures, and study of Latin influence on English poetry. This course is open to students who have passed three years of Latin in preparatory school.

Prerequisite: Latin 4. 5 prerequisite for 6. 3 recitations; 3 semester credits.

7, 8. Latin Prose and Comedy. The plays of Plautus and Terence, Livy's History (Books I and II), and Pliny's Letters will be studied for their value as mirrors of the life and history of Rome as well as for their literary value.

Prerequisite: Latin 4. 7 prerequisite for 8. 3 recitations; 3 semester credits.

51, 52. Philosophy and Satire. Particular attention will be paid to the study of philosophy, religion, natural science and social theories of the Romans, as exemplified in the writings of Horace, Martial, and Cicero.

Prerequisite: Latin 8. 51 prerequisite for 52. 3 recitations; 3 semester credits. (Given in alternate years; offered in 1937–38)

55, 56. Literature and History. This course offers a comprehensive view of Latin literature of the Golden Age. The works of Caesar, Cicero, and Virgil will be studied for their literary value and historical content. The history of Rome during the Golden Age will be studied in order to provide the background necessary to the student or teacher of the classics.

Prerequisite: Latin 8. 55 prerequisite for 56. 3 recitations; 3 semester credits. (Given in alternate years; not offered in 1937–38)

63, 64. Latin Composition and Teaching Methods. Translation of English narrative, beginning with the fundamentals of grammar and progressing to a study of prose style and effective idiomatic expression.

It is open to those who have taken or are taking another course in college Latin and is most necessary for prospective teachers of Latin.

Prerequisite. 63 prerequisite for 64. 3 recitations; 3 semester credits.

SPANISH

ASSISTANT PROFESSOR BERZUNZA, MR. FLOYD, MR. RAFFERTY

1, 2. ELEMENTARY SPANISH. Elements of Spanish grammar, reading of simple prose, oral practice, dictation.

Prerequisite: 1 prerequisite for 2. 3 recitations; 3 semester credits.

3, 4. MODERN SPANISH PROSE AND POETRY. Review of grammar, memorization, composition, oral practice and reading.

Prerequisite: Spanish 2 or its equivalent. Freshmen who offer two or more units of Spanish for admission to college may take this course. 3 prerequisite for 4. 3 recitations; 3 semester credits.

7, 8. THE SPANISH NOVEL. In the first part of the course, representative novelists of the modern period such as Fernán Caballero, Valera, Pérez, Galdós, Pardo Bazán and Palacio Valdés form the subject of study. In the latter part, Cervantes will be studied. Collateral reading, reports, and lectures on the history of the novel.

Prerequisite: Spanish 4. 7 prerequisite for 8. 3 recitations; 3 semester credits. (Given in alternate years; not offered in 1937–38)

11, 12. SPANISH DRAMA. Dramas of Lope de Vega, Calderón, Echegaray, the Brothers Alvarez Quintero, Benavente, and others. This course is carried on as far as possible in Spanish.

Prerequisite: Spanish 4. 11 prerequisite for 12. 3 recitations; 3 semester credits. (Given in alternate years; offered in 1937-38)

13, 14. SPANISH COMPOSITION AND CONVERSATION. The use of written and spoken Spanish is taught by careful attention to pronunciation, grammar, and composition.

This course is especially valuable for students who wish to teach Spanish and conduct Spanish clubs. Permission of the instructor is required before enrollment.

Prerequisite: Spanish 4. 13 prerequisite for 14. 3 recitations; 3 semester credits.

MATHEMATICS

Hermon L. Slobin, *Professor*
George N. Bauer, *Professor*
Walter E. Wilbur, *Associate Professor*
Marvin R. Solt, *Assistant Professor*
Miltiades S. Demos, *Assistant Professor*
William L. Kichline, *Instructor*
Donald M. Perkins, *Instructor*

1. Algebra. A study of algebra, beginning with a review of the fundamental principles of high school algebra and continuing with the subject matter of Mathematics 5. This course is designed for students whose high school training does not fit them for Mathematics 5. Mr. Perkins.

Prerequisite: Two years of mathematics in high school including at least one year of algebra. 6 recitations; 4 semester credits.

2. Trigonometry. The theory and applications of plane trigonometry and the analytic geometry of the straight line and certain special curves. Mr. Perkins.

Prerequisite: Mathematics 1, or its equivalent. 5 recitations; 4 semester credits.

3. Analytic Geometry. A course in analytic geometry equivalent to that part of Mathematics 6 covering analytic geometry. Assistant Professor Demos.

Prerequisite: Mathematics 2, or its equivalent. 3 recitations; 3 semester credits.

4. Calculus. A study of some of the more elementary fundamental concepts and operations of the calculus. It is designed to give to those who are not planning to continue the study of advanced mathematics some conception of the calculus as an instrument in the sciences, as a culture, and as a mental discipline. Associate Professor Wilbur.

Prerequisite: Mathematics 3 or 6. 3 recitations; 3 semester credits.

5, 6. First Year Mathematics. This constitutes a course in algebra, trigonometry, and analytic geometry. Professor Slobin, Associate

Professor Wilbur, Assistant Professor Solt, Assistant Professor Demos, Mr. Kichline, and Mr. Perkins.

Prerequisite: See requirements of mathematics for admission to College of Technology. 6 recitations; 5 semester credits.

7, 8. Calculus. Applications of differentiation and integration; special methods of integration; the definite integral, applications of the definite integral to geometry, physics, and mechanics; introduction to sequence and series. Professor Slobin, Assistant Professor Solt, Mr. Kichline and Mr. Perkins.

Prerequisite: Mathematics 3 or 6. 3 recitations; 3 semester credits.

10. Astronomy. A brief descriptive course. The earth as an astronomical body; the sun and the solar system; the constellations; the stars. Assistant Professor Solt.

3 recitations; 3 semester credits.

20. Solid Geometry. Elements of solid geometry. Mr. Perkins.

Prerequisite: High school algebra and plane geometry. 2 recitations; 2 semester credits.

21, 22. Mathematics for Students of Agriculture. Elements of algebra, geometry and trigonometry. Associate Professor Wilbur, Assistant Professor Solt and Mr. Kichline.

3 recitations; 3 semester credits.

31, 32. Elementary Mathematical Analysis. This course is designed to prepare students for the study of statistics and mathematics of finance. It uses both analytical and graphical methods. The subjects studied are some of the fundamental functions, logarithmic computations, the simpler elements of least squares, etc. Emphasis is placed upon finding mathematical laws or formulæ from empirical data. Professor Bauer, Associate Professor Wilbur and Mr. Kichline.

Prerequisite: High school algebra and plane geometry. 3 recitations; 3 semester credits.

34. Mathematics of Finance. A study of simple and compound interest, discount, annuities, depreciation, evaluation of securities, building and loan associations, and the elements of life insurance. Associate Professor Wilbur.

Prerequisite: Mathematics 31, 5 or 1. 3 recitations; 3 semester credits.

41, 42. Statistical Methods. This is a basic course and aims to present some of the fundamental principles and methods of statistics. Illustrative material drawn from several fields of study including education, business, sociology, and chance. It deals with such topics as the graphical representation of statistical material, frequency distribution, measure of dispersion, averages, time series, index numbers, correlation and estimations. Professor Bauer.

Prerequisite: Mathematics 32, 6 or 3. 3 recitations; 3 semester credits.

51, 52. Advanced Calculus, Differential Equations, Vector Analysis and Their Application to Engineering Problems. Assistant Professor Solt.

Prerequisite: Mathematics 8. 3 recitations; 3 semester credits.

53. Economic and Social Statistics. Applications of the statistical method to economic and social problems. Professor Bauer.

Prerequisite: Mathematics 42. 3 recitations; 3 semester credits.

55, 56. Advanced Plane and Solid Analytical Geometry. Professor Slobin.

Prerequisite: Mathematics 8. 3 recitations; 3 semester credits. (Given in 1937–38 and thereafter in alternate years.)

57. The History of Mathematics. This course is designed especially for those preparing to teach mathematics in the high school. It aims to give an historical background and an appreciation of the development of various fields of mathematics. Associate Professor Wilbur.

Prerequisite: Mathematics 4, or 7. 3 recitations; 3 semester credits. (Given in alternate years; not offered in 1937–38.)

61, 62. Sequences and Series. An introduction to advanced analysis. Professor Slobin.

Prerequisite: Mathematics 8. 3 recitations; 3 semester credits.

71, 72. Advanced Algebra. The following topics will be treated in this course: matrix theory, including elementary divisors and invariant factors; linear transformations; quadratic bilinear, and Hermitian forms; invariants and covariants with geometric applications; and topics from the theory of equations, including symmetric functions, and groups of substitutions. Assistant Professor Demos.

Prerequisite: Mathematics 8. 3 recitations; 3 semester credits. (Given in alternate years; not offered in 1937–38.)

Mathematics–Education (Math–Ed) 91. Problems in the Teaching of High School Mathematics. A study of the aims and values of secondary school mathematics, the recommendations of the national committee on mathematics requirements, and the state board requirements; also a study of the subject-matter and the sequence in which it should be presented in both junior and senior high schools, and the various techniques used in teaching secondary school mathematics. Errors, testing program, and remedial teaching will be included. Lectures, assigned readings and discussion. Associate Professor Wilbur.

Prerequisite: Mathematics 8, or 34 and 4. Students preparing to teach mathematics in high school should register for this course. 3 recitations; 3 semester credits.

MECHANICAL ENGINEERING

George W. Case, *Professor*
Edward L. Getchell, *Associate Professor*
Thomas J. Laton, *Assistant Professor*
Edward T. Donovan, *Assistant Professor*
E. Howard Stolworthy, *Assistant Professor*
John J. Uicker, *Instructor*
Lyman J. Batchelder, *Instructor*
John C. Tonkin, *Instructor*
Elias O'Connell, *Instructor*

1, 2. Engineering Drawing. The fundamentals of engineering drawing, including free-hand lettering, use of drawing instruments, the solution of problems in engineering drawing by applying the principles of descriptive geometry, including a brief study of isometric drawing. Assistant Professors Laton and Stolworthy and Mr. Uicker.

1: Required of all Technology Freshmen. 2: Required of Civil, Electrical and Mechanical Engineering Freshmen. 2 laboratories; 2 semester credits.

3. Machine Drawing. Application of the principles of engineering drawing to the drawing of machine parts. Various pictorial systems are studied as an aid in sketching. Commercial drafting room methods are employed in sketching machine parts, drawing from sketches, and making tracings. Reproduction methods and modern drafting room organizations are studied. Assistant Professor Laton.

Prerequisite: Mechanical Engineering 1. Required of Electrical and Mechanical Engineering Sophomores. 2 laboratories; 2 semester credits.

4. Kinematics. A study of motion in machine construction; belts, and other flexible connectors; gears and gear teeth; wheels in trains; epicyclic trains; cams; instantaneous centers; linkwork, velocity and acceleration diagrams. Assistant Professor Laton.

Prerequisite: Mechanical Engineering 1. Required of Electrical and Mechanical Engineering Sophomores. 2 recitations; 2 laboratories; 3 semester credits.

5, 6. Mechanical Laboratory. This course is primarily to acquaint the student with the field of mechanical engineering. The

student will be introduced to the mechanical laboratory and the University power plant and familiarized with the equipment therein. Problems in mechanical engineering practice will be presented and solved. Assistant Professor Donovan.

Required of Sophomores in Mechanical Engineering. 1 laboratory; 1 semester credit.

7, 8. MECHANICS. A study of forces and moment of forces; determination of stresses in trusses and cranes; centroids and center of gravity; rectilinear and curvilinear motion; translation and rotation of bodies; work, power and energy. The application of Mechanics to the determination of stress and strain in rigid bodies. The study of thin walled cylinders; riveted joints; torsion; transverse loading of beams; deflection in beams of all kinds; study of columns; compound stresses as applied to design of machine parts. Work in the second semester to be paralleled by exercises in the materials laboratory. Associate Professor Getchell.

Prerequisite: Mathematics 8. Required of Juniors in Mechanical Engineering. 7: 4 recitations; 4 semester credits. 8: 3 recitations; 1 laboratory; 4 semester credits.

9, 10. MECHANICS. Similar to 7 and 8, but with those portions having application to the design of machine parts omitted. Associate Professor Getchell.

Prerequisite: Mathematics 8. Required of Juniors in Civil and Electrical Engineering. 9: 3 recitations; 3 semester credits. 10: 3 recitations; 1 laboratory; 4 semester credits.

11, 12. MECHANICS. Principles of Mechanics as applied to architectural work. Study of force systems, moments, equilibrium, trusses, center of gravity and moment of inertia; tension, compression and shear; riveted joints; strength and deflection of beams; columns; reinforced concrete. Associate Professor Getchell.

Required of Junior Architects. 3 recitations; 3 semester credits.

13. Manufacture of Iron and Steel. Study of the location of ores and other raw materials entering into the manufacture of pig iron; of the blast furnace and conversion of pig iron into wrought iron; Bessemer and open hearth steels, and of the manufacture of steel by electrical methods. Course to be paralleled by a laboratory devoted to the identification and heat treatment of various types of steel. Associate Professor Getchell.

Required of Seniors in Mechanical Engineering. 2 recitations; 1 laboratory; 3 semester credits.

15, 16. Machine Design. The application of the principles of Mechanics to the design of machine elements. This work to be taken up with the idea of manufacturing the parts in the most economical manner in the shops. General principles of design will be followed rather than attempting to develop any particular system of procedure. Assistant Professor Laton.

Prerequisite: Mechanical Engineering 8. Required of Senior Mechanical Engineers. 1 recitation; 2 laboratories; 3 semester credits.

21, 22. Heat Power Engineering. A general study of power generation by steam and gas engines. The fundamental thermodynamic theory is briefly studied and power plant operation and equipment analyzed. Mr. Uicker.

Prerequisites: Mathematics 7 and Physics 8. Required of Civil Engineering Seniors. 21: 2 recitations; 2 credits. 22: 1 recitation; 1 laboratory; 2 semester credits.

23, 24. Thermodynamics. A study of the fundamental laws of thermodynamics and their relation to the operation of mechanisms using gases and vapors as their working substances. Assistant Professor Donovan.

Prerequisite: Mathematics 7. Required of Junior Mechanical Engineers. 3 recitations; 3 semester credits.

25, 26. Heat Power Engineering. A study of the laws of engineering thermodynamics and a consideration of steam power plant and internal combustion engine equipment. Assistant Professor Donovan.

Prerequisite: Mathematics 7. Required of Junior Electrical Engineers. 25: 3 recitations; 3 semester credits. 26: 3 recitations; 1 laboratory; 4 semester credits.

27. Mechanical Laboratory. A study of the apparatus and methods of testing power plant operation and equipment. Assistant Professor Donovan and Mr. Uicker.

Parallel requirement: Enrollment in Mechanical Engineering 25, 26. Required of Junior Electrical Engineers. 2 laboratories; 2 semester credits.

29, 30. Mechanical Laboratory. Methods of investigating operation and testing of power plant equipment. Assistant Professor Donovan and Mr. Uicker.

Parallel requirement: Enrollment in Mechanical Engineering 23. Required of Junior Mechanical Engineers. 29: 2 laboratories; 2 semester credits. 30: 1 laboratory; 1 semester credit.

32. Mechanical Laboratory. Testing of steam and gas engines in accordance with A.S.M.E. power test codes. Assistant Professor Donovan.

Prerequisite: Mechanical Engineering 30. Required of Senior Mechanical Engineers. 2 laboratories; 2 semester credits.

33, 34. Power Plants. A study of the steam generating power plant dealing with its equipment and costs. Assistant Professor Donovan.

Prerequisite: Mechanical Engineering 24. Required of Senior Mechanical Engineers. 33: 2 recitations; 2 semester credits. 34: 1 recitation; 1 laboratory; 2 semester credits.

35, 36. Automotive Engineering. A study of the internal combustion engine including its thermodynamics, carburetion, lubrication and vibration. Consideration is given to the design of the principle moving parts of the automotive vehicle. Assistant Professor Stolworthy.

Prerequisites: Mechanical Engineering 8 and 24. Alternate with Aeronautics for Seniors in Mechanical Engineering. 2 recitations; 1 laboratory; 3 semester credits.

37. Aeronautics. Elementary aerodynamics and aircraft construction; the use of the wind tunnel. Assistant Professor Stolworthy.

Prerequisites: Mechanical Engineering 8 and Civil Engineering 24. Alternate with Automotive Engineering for Seniors in Mechanical Engineering. 2 recitations; 1 laboratory; 3 semester credits.

38. Aerial Navigation. The instruments and methods used in navigation of aircraft. Assistant Professor Stolworthy.

Prerequisite: To be taken concurrently with Meteorology 4. 1 laboratory; 1 semester credit.

39. Heating and Ventilating. A study of the heat losses and ventilation requirements of buildings, and the design of specific heating and ventilating systems. Assistant Professor Stolworthy.

Required of Juniors in Mechanical Engineering. 2 laboratories; 2 semester credits.

41. Heating and Ventilating. A study of the present methods of heating and ventilating buildings. Assistant Professor Stolworthy.

Required of Juniors and Seniors in Architecture. 2 laboratories; 2 semester credits. (Given in alternate years; not offered in 1937–38.)

45, 46. Management. A study of the principles of management as they deal with the organization of operations, the administration of personnel and the economic expenditure and investment of money. Professor Case.

45: Required of Senior Mechanical Engineers and optional for Senior Civil and Electrical Engineers. 46: required of all Senior Engineers. 45: 2 recitations; 2 semester credits. 46: 3 recitations; 3 semester credits.

47, 48. Contribution of Engineers and Scientists to the Field of Engineering. Studies of the personal characteristics and life work of engineers and scientists. This course is intended for engineering students who are disqualified from Military Science and Physical

Education. Less reading will be required of students disqualified only from Military Science. Mr. Uicker.

2 recitations; 2 semester credits.

50. Thesis. The thesis embodies research or commercial investigation. Equal emphasis is placed upon composition and accuracy in subject matter.

Required of Senior Mechanical Engineers. 1 recitation; 2 laboratories; 2 semester credits.

A.S.M.E. 1, 2, 3, 4. Student Branch of American Society of Mechanical Engineers. An organization of Junior and Senior students in Mechanical Engineering. The course consists of preparation and presentation of addresses on mechanical engineering topics by members and in which the instructor present criticizes the work from the point of view of delivery, subject matter and terms used.

Required of Juniors and Seniors in Mechanical Engineering. No credit.

MECHANICAL ENGINEERING SHOP COURSES

S1, S2. Elementary Shop Practice. For Shop Work, Freshmen in Technology, except those in Architecture and Chemistry, are divided into three groups meeting simultaneously in wood shop, machine shop and forge shop. The work in the wood shop consists of pattern making and elementary foundry practice. In the machine shop, practice is given in the operation of engine lathes and other machine tools, and particular attention is given to the machinability of metals in the preparation of test specimens for use in the course in strength of materials. In the forge shop study is made of the operations necessary in the forging and welding of iron and steel, in the hardening, tempering, and annealing of steel. These groups interchange at the end of each twelve week period, so that all three subjects are covered during the year. Mr. Batchelder, Mr. Tonkin and Mr. O'Connell.

1 lecture; 2 laboratories; 3 semester credits.

S3, (S3). Wood Work. Plain cabinet making and finishing; use of stain filler, varnish, shellac, enamels, etc. Mr. Batchelder.

Elective for Liberal Arts and Teacher Training students. 2 laboratories; 2 semester credits.

S4. Wood Shop. Instruction in the care and use of tools in farm carpenter shop; saw filing; the making of various implements used on the farm; use of steel square; laying out frames; care of lumber on the farm. Mr. Batchelder.

Elective for students in Agriculture. 2 laboratories; 2 semester credits.

S5, (S5). Wood Shop. Practice teaching under the supervision of the instructor in wood working. Mr. Batchelder.

For Seniors in Industrial Teacher Training and Education. 2 laboratories; 2 semester credits.

S6. Wood Shop. Advanced pattern making and advanced cabinet making. Mr. Batchelder.

Prerequisites: Mechanical Engineering S1 and S3. For Seniors in Mechanical and Electrical Engineering and Education. 2 laboratories; 2 semester credits.

S12. Forge Shop. This is a study of the forging of iron and steel; and is designed to teach the operations of drawing, welding, upsetting, twisting, splitting, and punching of iron; the hardening, tempering, and annealing of steel; and the case hardening of mild steel as adapted to agricultural work. Mr. O'Connell.

Elective for students in Agricultural Teacher Training Curriculum. 2 laboratories; 2 semester credits.

S13, (S13). Forge Shop. Advanced work in forging, electric and acetylene welding, tempering, case hardening, tool dressing. Mr. O'Connell.

Prerequisite: Mechanical Engineering S11. For Seniors in Industrial Teacher Training Curriculum. 2 laboratories; 2 semester credits.

S17, (S17). Machine Shop. Continuation of work given in S1, S2. Mr. Tonkin.

Required of Electrical and Mechanical Engineering Sophomores. 2 laboratories; 2 semester credits.

S19, S20. Machine Shop. Advanced work on the lathe, milling machine, planer, shaper and turret lathe, involving making of tools and special machinery and apparatus. Mr. Tonkin.

Prerequisites: Mechanical Engineering S15 and S17. 2 laboratories; 2 semester credits.

S21, (S21). Machine Shop. Manufacturing. A course in the appreciation and measurement of skill, production methods, shop management and time study. Mr. Tonkin.

Prerequisite: Mechanical Engineering S20. 2 laboratories; 2 semester credits.

S23. Farm Shop. A short course in general shop work to suit the individual needs of a small class of Agricultural Teacher Training juniors. The work is to some extent adjusted to meet experience in shop work that students have already had. Mr. Tonkin and Mr. O'Connell.

Limited to Agricultural Teacher Training Juniors. 2 laboratories; 2 semester credits.

METEOROLOGY

CHARLES H. PETTEE, *Professor*
E. HOWARD STOLWORTHY, *Assistant Professor*
DONALD H. CHAPMAN, *Assistant Professor*

2. ELEMENTARY METEOROLOGY. A general course designed to aid the student in the interpretation of atmospheric phenomena. The major topics for discussion are: the earth as a planet, the heating and circulation of the atmosphere, the seasons, and the nature and movement of the air masses which influence the weather of North America and particularly New England. The course concludes with a brief consideration of some of the practical rules and methods of weather forecasting. Assistant Professor Chapman.

Elective for all students. 2 lectures or recitations; 2 semester credits.

4. PRINCIPLES OF METEOROLOGY. Fundamental physical and thermodynamic laws and general structure of the atmosphere. Air mass theory and a brief study of the technicalities underlying forecasting of atmospheric changes. Assistant Professor Stolworthy.

Prerequisite: Physics 7 or its equivalent. Optional for Seniors in Mechanical Engineering; to be taken concurrently with Mechanical Engineering 38. Elective for others. 2 lectures; 2 semester credits.

MILITARY SCIENCE AND TACTICS

COLONEL EDWARD W. PUTNEY, *Coast Artillery Corps, Professor*
MAJOR DONOVAN SWANTON, *Infantry, Associate Professor*
MAJOR GEORGE L. PRINDLE, *Infantry, Assistant Professor*
MAJOR SAMUEL L. BURACKER, *Infantry, Assistant Professor*
CAPTAIN W. GEORGE DEVENS, *Coast Artillery Corps, Assistant Professor*
SERGEANT FRED W. WOOD, *Coast Artillery Corps, Assistant*
SERGEANT FRED H. BROWN, *Infantry, Assistant*

Military training is carried on concurrently with the academic work in order that the college man may be prepared for service in time of

national emergency as well as for the pursuit of his business or profession.

Two courses in Military Science are offered, one in Coast (heavy and anti-aircraft) Artillery, and one in Infantry, each leading to a commission in the Officers' Reserve Corps of the United States Army. Each course, which covers four years, is divided into the basic course, covering the first two years, and the advanced course, covering the succeeding two years. The basic course is required of all male Freshmen and Sophomores who are physically fit. The advanced course is elective for those who have completed the basic course.

Exemptions or permission to be absent cannot be accorded to Freshmen or Sophomores; and any student who is absent from any part of the instruction will be required subsequently to make up the omitted training or its equivalent before being credited with the number of credits necessary for graduation.

Students enrolled in the Colleges of Liberal Arts and Agriculture will be assigned to the Infantry Course, and students enrolled in the College of Technology will be assigned to the Coast Artillery Course. Both courses include the fundamentals of military training, the object of which is the development of qualities which make for success in either civil or military life, such as good health and an erect carriage, courtesy and agreeable manners, enthusiasm, honor, aggressiveness and leadership. In addition, each course pays particular attention to the special material and methods used in that arm.

The Coast Artillery Course covers the principles of construction, use, and care of artillery. To the engineering student this course offers, in addition to military training, an excellent opportunity to observe practical applications of his classroom work and to enlarge his view of the engineering field.

The Infantry Course covers the organization, equipment, tactics and administration of Infantry units from the squad to the battalion. This course stresses leadership.

The Reserve Officers Training Corps

Physically fit male students who take military training are enrolled in the Reserve Officers Training Corps. Enrollments are for two years

each in the Basic and the Advanced Courses. Members of the Corps are loaned* all uniforms and equipment necessary in the training.

Advanced Course.—The students who are selected for the Advanced Course and who devote the prescribed time to this course, and attend such summer training camps as may be prescribed by the Secretary of War, are allowed during their Junior and Senior years commutation of subsistence at such rate as the Secretary of War may prescribe. During the academic year 1936-37 this was 25 cents per day, totalling about $160 for the two years. In addition, members of the Advanced Course are paid at the same rate of pay as privates of the Regular Army, while in actual attendance at the summer training camp. Allowance is also made for the purchase of uniforms and equipment by members of the Advanced Course.

Membership in the Corps does not require the student to enter into any agreement to continue in college a definite length of time, nor does it bind him to any military service. He is as much at liberty to leave college as though he were not a member. He is required, once having entered upon the course, to complete it as a requisite toward graduation in any college maintaining a unit of the Corps, and to observe the rules and regulations prescribed for the government of the Corps.

Commissions.—Each year upon the completion of the Advanced Course, all qualified students are tendered commissions in the Officers' Reserve Corps of the Army of the United States.

Summer Camps.—The requirement of members of the Advanced Course to attend the summer training camps is prescribed from time to time by the Secretary of War. These camps are organized by bringing together members of the R.O.T.C. from several colleges. The training taken at college is elaborated upon and special attention is paid to its practical side. The student is furnished transportation to and from camp and is provided with appropriate uniform for wear during this period, so that his only expenses are for laundry and such other personal expenditures as he may care to make. Excellent food is provided. Moral conditions are carefully controlled by the Regular Army officers in charge. The health and hygiene of the students are

* A deposit of $15 is required of each student having military equipment in his possession, whether registered for Military Science or not. At the end of the academic year or upon a student's severing his connection with the University this deposit will be refunded to him upon the satisfactory return to the University of all military property loaned except that a reasonable deduction will be made to cover any damage beyond natural wear and tear or for the loss of any of the equipment.

under direct supervision of medical officers and medical attention is provided for those requiring it while at camp. Athletic contests are a feature of the camp and intercollegiate athletics between members of the different units are encouraged. The student agrees to observe the rules of the camp and to give his best efforts to the course of training. Thus he is offered at no expense an exceptional opportunity for physical and mental development.

Organization.—The unit is organized into a regiment consisting of one battalion (three companies) of Infantry and one battalion (three batteries) of Coast Artillery. Student officers, selected from the Senior class by the Professor of Military Science and Tactics, with the approval of the President, are designated for field, staff and company officers not later than the opening of the spring term.

MILITARY SCIENCE COURSES

Basic Course, Infantry

1, 2. Military Fundamentals. Organization of the Army and Infantry; military discipline, courtesy and customs of the service; military history and policy; National Defense Act and the R.O.T.C.; military obligations of citizenship; the current international situation; military sanitation and first aid; weapons; rifle marksmanship; map reading; leadership; drill and ceremonies.

No prerequisites. Required of Freshmen. 2 recitations; 1 drill; or 3 recitations, according to season; 1½ semester credits.

3, 4. Second Year, Basic. Military history and policy, weapons, scouting and patrolling, musketry, combat principles, leadership, drill and ceremonies.

Prerequisite: 2. Required of Sophomores. 2 recitations; 1 drill; or 3 recitations, according to season; 1½ semester credits.

Advanced Course, Infantry

5, 6. First Year, Advanced. Weapons, aerial photograph reading and interpretation, combat training, estimate of the situation and combat orders, field fortification, leadership, drill and ceremonies.

Prerequisite: 4. 3 recitations; 1 drill; or 4 recitations, according to season; 3 semester credits.

7, 8. Second Year, Advanced. Military history and policy; company administration; military intelligence; signal communications; chemical warfare, defensive use of non-toxic agent; military law; combat principles, platoon, company and battalion; leadership; drill and ceremonies.

Prerequisite: 6. 3 recitations; 1 drill; or 4 recitations, according to season; 3 semester credits.

Basic Course, Coast Artillery

9, 10. Military Fundamentals. Organization of the Army and Coast Artillery; military discipline, courtesy and customs of the service; military history and policy; National Defense Act and the R.O.T.C.; military obligations of citizenship; the current international situation; primary coast artillery instruction; rifle marksmanship; ammunition, weapons and material; military sanitation and first aid; leadership; drill and ceremonies.

No prerequisites. Required of Freshmen in Coast Artillery. 2 recitations; 1 drill; or 3 recitations, according to season; 1½ semester credits.

11, 12. Second Year, Basic. Fire control and position finding for seacoast artillery; characteristics of naval targets; fire control and position finding for antiaircraft artillery; identification of aircraft; leadership; drill and ceremonies.

Prerequisite: 10. Required of Sophomores in Coast Artillery. 2 recitations; 1 drill; or 3 recitations, according to season; 1½ semester credits.

Advanced Course, Coast Artillery

13, 14. First Year, Advanced. Map and aerial photograph reading; combat orders; gunnery, seacoast and antiaircraft artillery; leadership; drill and ceremonies.

Prerequisite: 12. 3 recitations; 1 drill; or 4 recitations, according to season; 3 semester credits.

15, 16. Second Year, Advanced. Military history and policy; motor transportation; artillery tactics; artillery material, guns, carriages, mines and ammunition; military law; orientation, topographical operation required for artillery firing; field engineering; administration; leadership; drill and ceremonies.

Prerequisite: 14. 3 recitations; 1 drill; or 4 recitations, according to season; 3 semester credits.

Note.—Students following courses 1, 2; 3, 4; or 9, 10; 11, 12 above, who also elect to serve in the University Band, will receive ½ credit additional per semester.

MUSIC

Robert W. Manton, *Associate Professor and Director*
Lewis C. Swain, *Instructor and Bandmaster*

The courses offered by the department for a major are of three kinds:

1. Courses which are technical and grammatical in nature and are meant to provide a solid background for students intending to follow the musical profession as teachers and composers. These are Music 21, 22; 23, 24; 25, 26; 27, 28; 33, 34.

2. Courses which treat of the historical, literary and aesthetic side of music and are meant for those who wish to acquire a broad appreciation of the art, and to familiarize themselves with the standard works of musical literature. These courses are Music 15, 16; 17; 19, 20; and 29, 30.

3. The third group of courses is practical in nature and embraces the educational activities of the University Glee Clubs, Band, and Symphony Orchestra.

Closely related departments are Languages (French and German), and English (English Literature and Appreciation of Art).

It is recommended that students who intend to elect Music as a major consult the head of the department as early in the Freshman

year as possible relative to the best disposition of the sequence of courses in the major. All students majoring in Music are required to take the following subjects before graduation: Music 15, 16; 17; 19, 20; 21, 22; 23, 24; 25, 26.

For students who intend to take only one or two courses in Music, for the cultivation of musical taste and general knowledge, Music 15, 16, 17, or 19, and 20 are recommended as best adapted to this end.

Students interested in some particular musical organization, such as glee club or orchestra, are permitted to elect the work desired.

1, (1). University Band

Prerequisites: Ability to play some band instrument and satisfactory completion of Basic Course, R.O.T.C. Open to others with special permission of the Professor of Military Science and Tactics. 1½ semester credits.

3, (3). The Men's Glee Club

Open to all undergraduates interested in choral singing who fulfill the requirements of a try-out. ½ semester credit.

5, (5). Advanced Choral Club (Men)

Prerequisite: Music 3 and participation in some extra-curricular work. 1 semester credit.

7, (7) The Women's Glee Club.

Open to all undergraduates interested in choral singing who fulfill the requirements of a try-out. ½ semester credit.

9, (9). Advanced Choral Club (Women)

Prerequisite: Music 7 and participation in some extra-curricular activity. 1 semester credit.

11, (11). The University Symphony Orchestra

Open to all undergraduates interested in orchestral playing who can fulfill the requirements of a try-out. ½ semester credit.

13, (13). Advanced Orchestral Club

Departmental class illustrations, string quartet, trio playing and the like. Prerequisite: Music 11 and participation in some extra-curricular work. 1 semester credit.

Note: In all the above activities the educational values will be strongly stressed. The principles of ensemble,

solo work, tone production, diction and above all sound musicianship, will be studied and concerts prepared separately and in combination to enhance and vitalize the university life.

15, 16. The History of Music. This course will attempt to cover the period from modern Greece up to the twentieth century. The instruction is given in the form of lectures, and stress will be placed upon an intensive study of the actual systems, spirit and content of the music of the period rather than a brief resumé of biography and critical evaluations. The four divisions of study are as follows: (1) From Plain Song through Palestrina, Vittoria, etc., and the secular music of the English Madrigalists; (2) the Seventeenth Century and Johann Sebastian Bach; (3) the Classicists to Schumann; (4) Schumann to Debussy. Associate Professor Manton.

Elective. 2 lectures or recitations; 2 semester credits.

17. Twentieth Century Music. This course is the logical continuation of Music 15 and 16, and emphasizes the significant trends in modern music since 1900. The works of such contemporary composers as Sibelius, Stravinsky, Ravel, Hindemith, Schoenberg, Delius, Vaughan-Williams, Holst, Walton, Griffes, together with many others will be considered, listened to, and the values, gains, losses and shifts of emphasis discussed and every attempt made to adjust the listener's ear to the new values. Associate Professor Manton.

Elective. 2 lectures or recitations; 2 semester credits.

19, 20. The Appreciation of Music. This course begins with a study of the elements of music such as: rhythm, melody, harmony, homophonic and polyphonic types, constructive formulae, and the musical forms employed in composition; for upon the recognition of these elements depends the approach to intelligent listening. Comprehensive illustrations of the great musical literature with special attention to twentieth century music will be played and jointly analyzed by the instructor and students from the point of view of the listener. This course is open and especially recommended to all students who wish to become familiar with the art of music in its many phases, and gain a wider acquaintance with the past and present masterpieces of musical art. Associate Professor Manton.

Prerequisite: 19 prerequisite for 20. 3 lectures or recitations; 2 semester credits.

21, 22. Harmony, The Grammar of Music. The fundamental principles of the craft of music are embodied in the study of harmony. This course treats of the different chords in their natural and combined relations: triads, seventh and ninth chords with their inversions and resolutions; cadences, chromatically altered chords, augmented chords, suspensions; embellishing tones, modulation, melody writing, and pedal point.

The work consists of exercises on figured basses and the harmonization of given melodies and dictation. This course is especially recommended to Freshmen but may be elected by others. The ability to play some instrument will facilitate an understanding of the course. Associate Professor Manton.

Prerequisite: 21 prerequisite for 22. 2 lectures or recitations; 2 semester credits.

23, 24. Advanced Harmony and Strict Counterpoint. This course is intended to supplement Music 21 and 22, and to lay stress on the many significant innovations found in modern harmony; to make a study of modal harmony and its relation to the appreciation of fifteenth and sixteenth century music; and to study the five orders of strict two-part counterpoint. Associate Professor Manton.

Prerequisite: Music 22. 23 prerequisite for 24. 2 lectures or recitations; 2 semester credits.

25, 26. Counterpoint and Elementary Composition. Counterpoint is the combining of several melodic voices, a horizontal conception of writing, and is essential to all finished craftsmanship. The work will consist of the writing of three and four-part counterpoint, double counterpoint, choral figuration and free imitation.

The work in composition will include the detailed training relative to sentence formation, figure treatment, two-part and three-part forms, inventions, the variation forms, and the various rondo forms up to the sonata form. Associate Professor Manton.

Prerequisite: Music 22 and 24. 25 prerequisite for 26. 3 lectures or recitations; 2 semester credits.

27, 28. Instrumentation. This course is designed to ground the student in the idiomatic writing and technique necessary to score effectively for the symphonic orchestra. It necessitates a good grasp of the fundamental principles of harmony and counterpoint. All the orchestral instruments will be considered individually as to their technique, range, tonal qualities, possibilities and limitations; then in separate choirs, and finally in combination as a unit.

Orchestral scores will be studied in detail; score reading and reduction emphasized; and original work in this idiom encouraged. Associate Professor Manton.

Prerequisite: 22 and 24. 3 lectures; 3 semester credits.

29, 30. The History and Development of Choral Music. This is a special course consisting of lectures, reading and reports. Only a limited number of qualified students will be admitted.

The course is designed to trace a straight line through such study as: Gregorian Chant, folk song, the music of the Troubadours, the beginnings of harmony and counterpoint, the work of the Netherland masters and of Palestrina and his contemporaries; the German choral works of the Reformation, the Tudor School in England; the choral works of Bach, Handel, etc. It ends with a consideration of the choral literature of the nineteenth century and of the modern French, English and Russian choral composers, such as Elgar, Delius, Holst, Vaughan-Williams, Lambert, Walton, Honegger, etc.

Students will meet three times a week, the third meeting being devoted to class singing and study of the works considered in the lectures. Associate Professor Manton.

3 lectures or recitations; 2 semester credits. (Given in alternate years; offered in 1937-38)

31, 32. Public School Music and Its Allied Fields. The purpose of this course is three-fold in nature. First, to lay down basic method material and principles of approach for the purpose of cultivating the taste for the best music; and the expansion of these methods and repertoire through the junior and senior high school periods. Second, to cultivate through the principles of appreciation a growth in perception, understanding and general responsiveness to

the art of music, approaching it through formal design and emotional content. Third, to give the individual student training and practical experience in the art of conducting, organization and the production of artistic results in glee clubs and orchestras.

Prerequisite: 31 prerequisite for 32. 2 lectures or recitations; 2 semester credits.

33, 34. Canon and Fugue. Canon and fugue are the most advanced forms of polyphonic composition and require a thorough grounding in harmony and counterpoint. The object of this course is to perfect the contrapuntal technique of the student, enabling him to study the larger and freer forms of composition. The work will be based on the fugal works of Bach and Franck, and consists of practice in writing rounds, the more practical types of canon, and of the analysis and composition of fugues. Associate Professor Manton.

Prerequisite: Music 22, 24, and 26. 33 prerequisite for 34. 2 lectures or recitations; 2 semester credits.

VOICE

Frances E. DeWolfe, *Instructor in Voice*

An opportunity to secure private instruction in voice is available to all students. This offering does not carry academic credit and therefore cannot be used to satisfy major, group, college and university requirements.

Tuition: Students who elect this course will pay tuition (in addition to University tuition) as follows:

Private instruction in voice, $1.50 per 30-minute lesson.

It is possible to take one lesson every other week, according to the individual circumstances of a student.

Voice 1. Elementary Course. This course consists of a correct knowledge of such fundamentals as: breath control, resonance, flexibility of voice, attack, enunciation and articulation. It also consists of a practical knowledge of sight singing which enables the student to read and understand his music as fast as the voice acquires the

ability to perform the same, supplemented by the correct singing of the simpler form of song or ballad.

Elective. 1 lesson a week.

Voice 2. Intermediate Course. This course consists of the development of the fundamentals of voice placing such as: breath control, resonance, etc., together with a progressive step in reading made by singing through the different keys. This is supplemented by songs and ballads of medium difficulty, church music, quartet work. Emphasis is placed on dramatic values from the singer's standpoint.

Prerequisite: Voice 1 or the equivalent. 1 lesson a week.

Voice 3. Advanced Course. This course presupposes the two previous ones; furthers the fundamentals of voice placing; aids in the mastery of all modes, intervals and musical phrases; develops the voice and acquires control of it for finished execution. This is supplemented by a study of the oratorio, opera, and the master works of song.

Prerequisite: Voice 1 and 2. 1 lesson a week.

Note: Voice 1–3 are fee courses.

PHILOSOPHY AND PSYCHOLOGY

Herbert F. Rudd, *Professor*
Adolph G. Ekdahl, *Associate Professor*
Naomi G. Ekdahl, *Assistant Professor*

PHILOSOPHY

Professor Rudd

49. Introduction to Philosophy. A general survey of the persistent problems of life in the light of modern scientific and philosophic insights. Topics include the origin and nature of the universe, of life, and of mind; also the nature of religious, ethical and aesthetic values.

Elective for Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

50. The Art of Thinking: Logic. A study of the many factors which determine the quality of human thinking as trustworthy or untrustworthy and an effort to discover all of the aids to better thinking practices.

Prerequisite: Philosophy 49. Elective for Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

81. Major Movements in European Philosophy. A selective study of the most significant systems from Thales to Nietzsche.

Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits. (Given in alternate years; offered in 1937–38)

82. Major Systems and Problems of Current Philosophy. A study of the chief efforts to build integrated world-views in the light of modern scientific, economic and social changes; and the possibilities of a constructive synthesis of modern thought patterns.

Prerequisite: Philosophy 81 or its equivalent. Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits. (Given in alternate years; offered in 1937–38)

83. The Evolution of Social Values and Ethical Judgments. An outline of the development of biological, psychological and social capacities which are essential to the appearance of any community values; a study of the moral significance of early group life; the economic and cultural factors which shape value systems; the divergent patterns of moral sentiment in advanced civilizations; and possible standards of judging folkways and ethical assumptions.

Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

84. Ethical Problems of Today. An analysis of the factors which bring personal and social crises in the present generation; and a study of the ideals, principles and programs which may successfully meet these problems.

Prerequisite: Philosophy 83. Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

85, 86. The Philosophy and Culture of the Far East. A study of major movements in the life and thought of eastern Asia.

Elective for Juniors and Seniors. 3 lectures or recitations; 3 semester credits. (Given in alternate years; not offered in 1937-38)

87, 88. Seminar: Special Problems in Philosophy.

Elective for Seniors with the consent of the instructor. Credit to be arranged.

PSYCHOLOGY

Associate Professor A. G. Ekdahl
Assistant Professor N. G. Ekdahl

Graduate Work: For courses primarily for graduate study see Catalog of the Graduate School.

21, 22. Elementary Psychology. This course is a study of the individual personality. It is designed to assist the individual to avoid unwholesome attitudes and cultivate wholesome ones. Practical helps will be given in regard to study and vocational and social problems. In the second semester, the student will learn of the laws and principles of general elementary psychology, with their applications to everyday situations. Associate Professor Ekdahl and Assistant Professor Ekdahl.

Prerequisite: 21 prerequisite for 22. 3 lectures or recitations; 3 semester credits.

51. Psychology of Childhood and Adolescence. A study of the normal child and adolescent. The mental processes and emotional reactions are studied in order that child and adolescent personality may be understood. Suitable for those preparing to be teachers, homemakers, social workers, pediatricians, nurses, school psychologists, and clinicians. Assistant Professor Ekdahl.

Prerequisite: Psychology 22. 3 lectures or recitations; 3 semester credits.

52. Learning and Measurements. This course is a study of the learning process of the individual and a survey of measurements of

intelligence and educational achievement. Administration of intelligence tests and construction of informal objective examinations are projects of the course. Assistant Professor Ekdahl.

Prerequisite: Psychology 22. 3 lectures or recitations; 3 semester credits.

55, 56. Applied Psychology. The elementary laws, facts and principles of psychology are considered with special reference to the problems of advertising and selling. In the second semester, psychological problems relating to general industrial efficiency and personnel are considered. Associate Professor Ekdahl.

Prerequisite: One year of Psychology. 3 lectures or recitations; 3 semester credits.

57, 58. Experimental Psychology. Standard experiments on sensation, perception, association, imagination, learning and reasoning. Emphasis will be given toward the development of the proper technique of psychological investigation. Associate Profesor Ekdahl.

Prerequisite: Psychology 22. 1 lecture and 2 laboratories; 3 semester credits.

61. Abnormal Psychology. A study of abnormal phenomena such as the disorders of perception, association, memory, judgment and the personality. The symptoms of the more common psychoses will be presented and some mention made of the psychoneuroses. A brief review of mental defectiveness will also be given. Visits to institutions. Associate Professor Ekdahl.

Prerequisite: Psychology 22. 3 lectures or recitations; 3 semester credits.

62. Mental Hygiene. A study of the problem individual. Prevention of problems is stressed but detection and simple diagnosis taught. Ways and means of maintaining a normal mind and re-educating the individual of distorted attitudes are discussed. Case studies are made and an instruction trip taken. Suitable for those preparing to be teachers, home-makers, social workers, physicians, nurses, school psychologists, and clinicians. Assistant Professor Ekdahl.

Prerequisite: Psychology 22. 3 lectures or recitations; 3 semester credits.

65. Physiological Psychology. A study of the physiological aspects of sensations, perceptions, memory and learning and a consideration of possible correlations between nerve functions and mental activity. Associate Professor Ekdahl.

Prerequisite: One year of Psychology. 3 lectures or recitations; 3 semester credits.

66. Comparative Psychology. A study of psychogenesis beginning with the one-celled animals. Simple experiments in animal learning. Associate Professor Ekdahl.

Prerequisite: One year of Psychology. 3 lectures or recitations; 3 semester credits.

68. Systematic Psychology. A brief survey of the field of theoretical psychology. Psychological concepts and theories as developed by the various modern "schools" of psychology, such as Functionalism, Behaviorism, Gestalt, and Structuralism, are considered. Associate Professor Ekdahl.

Prerequisite: One year of Psychology. 3 lectures or recitations; 3 semester credits.

71, 72. Seminar: Special Problems in Psychology. Associate Professor Ekdahl and Assistant Professor Ekdahl.

Prerequisite: Two years of Psychology. ½ to 3 semester credits.

PHYSICAL EDUCATION

PHYSICAL EDUCATION FOR MEN

WILLIAM H. COWELL, *Professor, Director of Athletics and Coach of Football*

HENRY C. SWASEY, *Associate Professor, Supervisor of Intramural Sports, Coach of Baseball and Basketball*

PAUL C. SWEET, *Assistant Professor, Supervisor of Corrective Physical Education, Coach of Track, Cross-Country and Relay*

E. W. CHRISTENSEN, *Assistant Professor, Assistant Coach of Varsity Football, Coach of Hockey and Lacrosse*

CARL LUNDHOLM, *Assistant Professor, Assistant Coach of Varsity Football, Supervisor of Interscholastic Basketball Tournament, Coach of Freshman Baseball*

JOHN J. CONROY, *Instructor, Assistant Supervisor of Intramural Sports, Coach of Freshman Basketball*

EDWARD J. BLOOD, *Instructor, Coach of Winter Sports, Assistant Coach of Cross-Country and Track*

HENRY DEMERS, *Instructor, Coach of Freshman Football and Intramural Activities*

CHARLES O. NASON, *Department Financial Secretary*

WILLIAM F. MARSH, *Trainer*

EDWIN F. DORR, *Department Secretary*

CHARLES SCHOONMAKER, *Supervisor of Athletic Equipment*

AIMS—1. To promote regulated exercise and to provide an incentive and opportunity for every student to receive physical recreation.

2. To secure good posture, a uniform development, and a reasonable amount of bodily skill and grace.

3. To stimulate the habit of exercise.

EQUIPMENT.—The Gymnasium affords accommodations for training and indoor games.

Lockers and showers are provided on the ground floor, offices and main exercise floor on the first floor, and department offices on the second floor.

The Memorial Field adjoins the Gymnasium. Adjoining Memorial Field is an attractive pond providing fine facilities for swimming, skating, hockey, and winter sports. Nearby is an oval board track for winter training in track and relay.

Lewis Fields, located a short distance from the Gymnasium, include six fields for football, soccer, lacrosse, and four baseball diamonds for alternate use with some of the aforementioned, a first-class cinder track with a 220 yard straightaway and pits and runways for jumping and vaulting, fourteen composition and six clay tennis courts, concrete bleachers seating 1750 spectators at baseball games and concrete stands seating 5000 spectators at football and track and field contests. The 'varsity baseball field on Lewis Fields is known as Brackett Field, in honor of William H. L. Brackett, '14, prominent student leader in his college generation who died from wounds received during the World War.

Requirements.—All men students in the freshman and sophomore classes are required to complete the prescribed work in Physical Education. All men disqualified from the regular class work in Physical Education shall be required to register for work in corrective gymnastics, unless excused by the University Health Officer upon recommendation of the University Physician.

The gymnasium suit adopted by the department consists of a gray cotton sleeveless jersey, gray trunks with blue trimming on leg seams, white woolen socks and rubber-soled tennis or basketball shoes. This suit must be worn at all class exercises in Physical Education.

The minimum requirement of each semester's work calls for participation in some form of approved physical exercise for two periods weekly for 13 weeks.

Students may elect any scheduled activity desired, either as members of an organized athletic squad or as members of regular sections of an approved activity.

The activities which are offered during the year are baseball, basketball, cross country, football, hockey, skating, skiing, snowshoeing, tennis, track and volley ball.

(*Consult "Subject and Room Schedule" for Schedule of Approved Activities.*)

31, 32. Physical Education. The program for the year consists

of numerous seasonal activities. Students may elect the activity desired. For students physically unfit, corrective gym work will be prescribed.

Required of all Freshmen. Work, 2 hrs.; ½ credit.

33, 34. PHYSICAL EDUCATION. The year's program consists of numerous seasonal activities. Students may elect the activity desired. For students physically unfit, corrective gym work will be prescribed.

Required of all Sophomores. Work, 2 hrs.; ½ credit.

PHYSICAL EDUCATION FOR WOMEN

MARGARET R. HOBAN, *Assistant Professor and Director*
GWENYTH M. LADD, *Instructor*
NELL EVANS, *Assistant*
MARION BECKWITH, *Assistant*

REQUIREMENTS. Freshmen women are required to take Physical Education 1, 2. Every woman student must take at least one course of physical activity each semester of her Freshman, Sophomore, and Junior years. One additional activity each semester, or a Physical Education theory course each year, may be elected for credit. Except in special cases, no more than two semesters of the same activity shall be credited.

Zoölogy, Psychology, and Education are related departments. Certain courses in these departments will be accepted for the completion of a major.

Each student must, upon entering, have a physical examination by the University Physician and a posture test by the Physical Education Staff. Semester activities elected by students are approved by the department on the basis of the results of these examinations. Students unfit for active Physical Education are assigned theoretical work in hygiene.

OBJECTIVES. To encourage wholesome recreational activities; to establish fundamental health habits; to maintain a balance between mental and physical development.

Required Costume. White step-in blouse, New Hampshire blue tunic, blue ankle-length hose, and regulation gymnasium shoes.

1, 2. Physical Education.

A study of the art of healthful living, problems of personal adjustment in relation to health, personal appearance, conduct, and development of personality will be discussed together with a consideration of the contribution of college training to woman's place in the social world.

The objectives of the course are the development of poise, personal appearance, and health. There will be one lecture or recitation period per week. In addition to the above, practical work in physical education will be scheduled as follows:

First Semester. Hockey, soccer, tennis, archery, basketball, formal gymnastics, informal gymnastics, folk dancing. (Consult Course Time and Room Schedule for combinations of the above courses according to season of the year.) Individual gymnastics (required of each freshman whose physical condition indicates this need.)

Second Semester. Informal gymnastics, formal gymnastics, basketball, archery, tennis, baseball, lacrosse. (Consult Course Time and Room Schedule for combinations of the above courses according to season of the year.) Dancing, individual gymnastics. (These courses continue throughout the semester.)

Required of all Freshmen. 1 lecture or recitation; 2 laboratory periods; 2 semester credits.

11, 12. Physical Education.

Elective courses open to Freshmen are the same as Physical Education 1, 2.

Open to Freshmen. 2 periods; 1 semester credit.

3, 4. Physical Education.

First Semester. Archery, tennis, hockey, soccer, bowling, informal gymnastics, formal gymnastics, winter sports, fencing, basketball, folk dancing. (Consult Course Time and Room Schedule for combinations of the above courses according to season of the year.) Tap dancing, modern dancing, individual gymnastics. (These courses continue throughout the semester.)

Second Semester. Informal gymnastics, formal gymnastics, fencing, basketball, tap dancing, bowling, winter sports, archery, tennis, lacrosse, baseball, golf. (Consult Course Time and Room Schedule for combinations of the above courses according to season of the year.) Dancing, individual gymnastics. (These courses continue throughout the semester.)

Required of Sophomores. 2 periods; 1 semester credit.

13, 14. PHYSICAL EDUCATION.
Elect semester courses from the list under Physical Education 3, 4.
Open to Sophomores. 2 periods; 1 semester credit.

5, 6. PHYSICAL EDUCATION.
Elect semester courses from the list under Physical Education 3, 4.
Required of Juniors. 2 periods; 1 semester credit.

15, 16. PHYSICAL EDUCATION.
Elect semester courses from the list under Physical Education 3, 4.
Open to Juniors. 2 periods; 1 semester credit.

7, 8. PHYSICAL EDUCATION.
Elect semester courses from the list under Physical Education 3, 4.
Open to Seniors. 2 periods; 1 semester credit.

17, 18. PHYSICAL EDUCATION.
Elect semester courses from the list under Physical Education 3, 4.
Seniors majoring in this Department are expected to elect this course.

2 periods; 1 semester credit.

In addition to the regulation costume required of all students, the following regulations and approximate prices should be noted: students are required to furnish their own individual equipment for such activities as tennis, tap dancing, modern dancing, individual gymnastics, winter sports; bowling, 20 cents a class.

MAJOR COURSES

Students majoring in physical education are expected to take the courses listed below. Women students from other departments may, however, elect any of these courses provided they have the proper prerequisites.

19. Introduction to Physical Education. A study of the ideals and development of physical education from ancient times through the medieval and modern ages; the development of the Swedish, German, and American systems, and the social, political and religious conditions which have influenced the physical life of nations. Assistant Professor Hoban.

2 lectures; 2 semester credits.

21, 22. Play and Recreation Leadership. This course includes the theories of play, the place of play in education; administration and organization of play, leadership of play and recreation, hobbies, camping, pageantry, dancing, and leisure time activities. Very useful for those who intend to do playground, summer camp, or community recreation work. Assistant Professor Hoban.

3 lectures; 3 semester credits.

31, 32. The Theory and Coaching of Athletics. A detailed study of the principles involved in the teaching of team games and individual sports. Emphasis will be placed on coaching methods and officiating. Miss Ladd.

1 lecture or recitation; 2 laboratories; 2 semester credits.

41, 42. Remedial Gymnastics and Massage. This course deals with the adaptation of exercise to individual needs; physical abnormalities and their corrections; theory and practice of massage. Assistant Professor Hoban.

Prerequisites: Zoölogy 1, 2; 3, 4. 41 prerequisite for 42. 2 lectures or recitations; 2 laboratories; 3 semester credits.

(P–E) 91, 92. Problems in the Teaching of Physical Education for Women and Supervised Teaching. A professional point of view of modern physical education. The course includes a definitely organized program of activities from the primary grades through college. Opportunity will be given the students for supervised teaching in the grades and high school. Miss Ladd.

3 lectures or recitations; 2 laboratories; 4 semester credits.

PHYSICS

HORACE L. HOWES, *Professor*
CLEMENT MORAN, *Associate Professor*
RAYMOND R. STARKE, *Assistant Professor*
WILLIAM H. HARTWELL, *Assistant Professor*
HAROLD I. LEAVITT, *Instructor*

1, 2. INTRODUCTORY PHYSICS. The properties of matter, heat, magnetism, electricity, wave-motion, sound, and light. The course includes experimental lectures and laboratory exercises in addition to recitations from Black's *College Physics.*

Required of students in Agriculture. Elective for Liberal Arts students. 1 lecture; 2 recitations; 1 laboratory; 4 semester credits.

3, 4. PHYSICS FOR ARCHITECTS. An introductory course in which attention is given to stresses in solids, pressure in fluids, transmission of heat, distribution of illumination, acoustics, etc. Lectures, recitations, problem work and experiments. A knowledge of high school algebra and geometry is presupposed. Assistant Professor Hartwell.

Required of Sophomores in Architecture. Elective for Liberal Arts students. 1 lecture; 2 recitations; 1 laboratory; 4 semester credits.

5, 6. PRE-MEDICAL PHYSICS. A course in the general principles of physics with attention to the needs of the students in preparation for medical work, such as the presentation of data in graphical form, also the handling of electrical apparatus. Assistant Professor Starke.

Open only to Juniors and Seniors in the Pre-Medical Curriculum. 3 recitations; one 3-hour laboratory; conferences; 5 semester credits.

7, 8. GENERAL PHYSICS. Mechanics and properties of matter; heat; selected topics in sound and light; electricity and magnetism; from Duff's *Text Book of Physics.*

Prerequisites: Mathematics 3 or 6 in advance, and Mathematics 7, 8 either in parallel or as a prerequisite. Physics 7 prerequisite for 8. Required of Sophomores in Chemical, Civil, Electrical and Mechanical Curricula. Elective for those Liberal Arts students who have passed 1, 2 and have the prerequisites in Mathematics. 1 experimental lecture; 3 recitations; 1 problem hour; 4 semester credits.

9. General Physics Laboratory. Open only to those students who are studying Physics 7, or who have previously obtained credit for Physics 7. Experiments in mechanics and properties of matter, with report writing and curve plotting of data. The reports are carefully criticized by the department and corrected by the student. Appreciation of the laws of physical science; the development of laboratory technique, and the estimation of the limitations of scientific experimentation are the aims.

Prerequisites: The same as those for Physics 7, 8. Required of Sophomores in Chemical, Civil, Electrical and Mechanical Curricula. Elective for Liberal Arts students under the same conditions as specified for Physics 7. 2 laboratories; 3 semester credits.

10. General Physics Laboratory. A continuation of Physics 9 to include experiments in heat, sound, light, electricity and magnetism.

Prerequisites: Physics 7 and 9. Physics 8 in parallel or as a prerequisite. Required of students in Chemical, Civil, Mechanical and Electrical Curricula. Elective for Liberal Arts students. 2 laboratories; 3 semester credits.

14. Elementary Optics and Photography. The fundamental principles of geometric optics as applied to photographic instruments. Laboratory work includes a study of focal planes, images, and other properties of lenses, together with the making of photographs. Students will furnish their supplies, which will cost approximately $2.00. Associate Professor Moran.

Prerequisites: Physics 2, or 8. Course not open to Freshmen. 1 lecture; 1 recitation; 1 laboratory; 3 semester credits.

51. Theory of Electrons. A brief study of the theory of electricity to include the passage of a current through a gas, the mobility of ions, the determination of charge and mass of the electron, ionization by collision, the corona discharge, cathode rays, positive rays, thermionic emission, photo-electricity, and X-rays. Professor Howes.

Prerequisites: Physics 7, 8; Mathematics 7, 8. Required of Seniors in Electrical Engineering Curriculum. Open to Juniors or Seniors in Liberal Arts on the same conditions. 2 lectures; 2 semester credits.

52. Electrical Measurements. Experiments on the use of precision potentiometers, the constants of sensitive galvanometers, time tests of batteries, low resistance by the Kelvin double bridge, high resistance by the method of leakage, the use of alternating current bridges for measuring capacity, self and mutual inductance and frequency, the characteristics of various types of photo-electric cells, and the Millikan oil-drop experiment. Associate Professor Moran.

Prerequisites: Physics 8 and 10. Required of students in Electrical Engineering and Chemistry. 1 lecture; 1 laboratory; 3 semester credits.

54. Acoustics. An elementary course in the principles of sound origins, propagation, and reception. The course consists of recitations based on *Sound* by Capstick. Professor Howes.

Elective for students who have passed Physics 2 or 8. 3 recitations; 3 semester credits.

POLITICAL SCIENCE

Thorsten Kalijarvi, *Associate Professor*
*Erwin W. Bard, *Instructor*
Edmund W. Fenn, *Instructor*

Courses in this department aim to give the student a grounding in political science which should not only serve the purpose of general culture, but also prepare for more intensive work in fields of specialized study, such as law, teaching, politics, government service, and social work. Students are urged to supplement their work in political science with courses in English, economics, history, and sociology. The department, with a view to broadening the student's range of ideas, or in preparation for research, recommends the acquisition of a reading knowledge of one or more foreign languages, preferably French and German.

1, 2. Citizenship. This is the introductory course in political science which majors in the department are advised to take in the Sophomore year, and to which students seeking an initial elective in political science are referred. It deals with problems and mechanics of political expression such as public opinion and its agencies; the

* Leave of absence, 1936-37.

history, membership, structure and aims of organizations exerting political pressure, especially political parties, nominations, and elections; and political democracy and the meaning of the state.

Public Lectures. Prominent individuals in local, state or national public life will be invited to speak on phases of governmental organization or policy. These lectures will be open to anyone who is interested without registration. Associate Professor Kalijarvi and Mr. Bard.

3 lectures or recitations; 3 semester credits.

3, 4. American Government. A discussion of the work and organization of federal, state, and local government, and political parties in the United States. Emphasis will be placed upon the functional relations between the several branches of government, and between political organizations and governmental policies. Mr. Bard.

Prerequisite: 3 prerequisite for 4. Open to Sophomores, Juniors, and Seniors. 3 lectures or recitations; 3 semester credits.

5, 6. European Governments. A survey of the character, form and political practices of contemporary foreign governments. Some attention will be given to contemporary movements and developments. A comparison of the organs of governments as they are observed in action or as they may be evaluated in theory. Mr. Bard.

Open to Sophomores, Juniors and Seniors. 3 lectures or recitations; 3 semester credits.

7, 8. International Law. The study of the law governing the relations of states, consisting primarily of discussions supplemented by the preparation of hypothetical cases. Associate Professor Kalijarvi.

Prerequisite: One semester's work in Political Science. 7 prerequisite for 8. Junior course. 3 lectures or recitations; 3 semester credits.

51. Constitutional Law. The case study of the constitutional development of the United States in terms of supreme, federal, and state court decisions. Associate Professor Kalijarvi.

Prerequisite: One year's work in Political Science. Junior course. 3 lectures or recitations; 3 semester credits.

52. Introduction to Jurisprudence. A study of the generalized principles of law and legal institutions. A survey of the law as an institution of social and political control. Discussion and lecture. Associate Professor Kalijarvi.

Prerequisite: Political Science 7 or 8 or 51. 3 lectures or recitations; 3 semester credits.

53, 54. Political Theory. A reading course in the classics of political thought, including one important work of Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau, Burke, Paine, Adam Smith, Ricardo, Bentham, Marx, and of others as time will permit. An effort will be made to analyze the political philosophy of the several 19th century schools, and to give the student a philosophical approach to modern political problems. Mr. Bard.

Prerequisite: Two years' work in Political Science. Senior course. 3 lectures or recitations; 3 semester credits.

55, 56. International Relations and World Government. A study of the forms of international organizations and world politics. This course deals with the rise of the modern nations and their relation to each other. Special effort is made to acquaint the student with the international world in which he is living. Associate Professor Kalijarvi.

Prerequisite: Two years' work in Political Science. Open to Seniors majoring in History and Economics. 3 lectures or recitations; 3 semester credits.

9, 10. Seminar. Papers will be prepared on assigned topics, and reports made under the guidance of the head of the department. Associate Professor Kalijarvi.

Prerequisite: 9 prerequisite for 10. For majors who have completed two years' work in Political Science. ½ to 4 semester credits.

POULTRY HUSBANDRY

T. Burr Charles, *Professor*
Carl L. Martin, *Assistant Professor*
Charles A. Bottorff, *Assistant Professor*
Albert E. Tepper, *Instructor*

1. Farm Poultry. A course devoted to a study of the general principles of poultry husbandry and their practical applications. Emphasis is placed on factors of culling, breeding, housing, feeding,

marketing, diseases and parasites, incubation and management. Professor Charles.

Recommended elective for Freshmen in Agriculture. 2 lectures; 1 laboratory; 3 semester credits.

3, 4. Poultry Problems. Students make a study of various selected poultry problems, compiling and presenting such accurate and detailed information as will add materially to their fund of knowledge. Professor Charles and Assistant Professor Martin.

Required of certain Seniors in Poultry Husbandry. Hours to be arranged. 1 semester credit.

6. Poultry Breeding. A study of the genetic principles involved in breeding for egg production including practical application and demonstration. Professor Charles.

Prerequisite: Poultry Husbandry 1. Required of all Juniors in Poultry. Elective for others. 2 lectures; 2 semester credits.

7. Poultry Breeds and Judging. The origin, history and classification of breeds. Theory and practice in judging fowls for egg production and exhibition. Mr. Tepper.

Required of Seniors in Poultry. Elective for others. 2 lectures; 1 laboratory; 3 semester credits.

8. Incubation and Brooding. A study of the principles involved in incubation and brooding of poultry; embryonic development. Students individually operate incubators and care for groups of chicks. Professor Charles.

Prerequisite: Poultry Husbandry 1. Required of Seniors in Poultry. Elective for others. 2 lectures; 1 laboratory; 3 semester credits.

9. Poultry Marketing. The preparation of poultry and eggs for market. A study of egg qualities and grades, candling and packaging; study of egg and poultry market conditions; practical instruction in killing, picking, dressing and similar operations. Mr. Tepper.

Required of all Juniors in Poultry. Elective for others. 2 lectures; 2 semester credits.

10. Poultry Feeding. A study of the principles of feeding; analysis of recent experimental work and current feed problems. Each student will care for a group of birds for several weeks for practical observation and collection of data. Mr. Tepper.

Prerequisite: Poultry Husbandry 1. Required of Seniors in Poultry. Elective for others. 2 lectures; 1 laboratory; 3 semester credits.

11. Poultry for Teachers. This course is designed to give to Teacher Training students the information which they will need in teaching courses in poultry in secondary schools. Open to Teacher Training students only. Mr. Tepper.

Hours to be arranged. 2 semester credits.

12. Poultry Housing. Design and construction of poultry houses and equipment. Study of plans; costs of materials; management principles. Mr. Tepper.

Required of certain Seniors in Poultry. Elective for others. 1 lecture; 1 laboratory; 2 semester credits.

13. Poultry Management. The application of successful business principles to poultry farming; study of surveys and production costs. As a part of the laboratory work, a detailed "three year" development plan of a poultry farm will be studied. Professor Charles.

Prerequisite: Poultry Husbandry 1. Required of Juniors in Poultry. Elective for others. 2 lectures; 1 laboratory; 3 semester credits.

14. Poultry Practice. This course is designed to give the student practical work at the University poultry plant in the hatching, rearing and care of chickens. Professor Charles.

Required of all Juniors in Poultry. Ten hours of practical work. 4 semester credits. (Note: By permission of the Department, students who have had previous practical poultry experience may substitute 4 semester credits of electives for this course.)

15. Poultry Diseases. A study of the anatomy of the fowl and poultry diseases and parasites encountered in poultry practice. Lectures and clinics for discussion of methods of prevention and control. Assistant Professor Bottorff.

Prerequisite: Poultry Husbandry 1. Required of all Seniors in Poultry. Elective for others. 3 lectures; 1 laboratory; 4 semester credits.

17, 18. Poultry Seminar. A consideration of experimental data on all phases of poultry husbandry. Students abstract and report on various current poultry topics. A thesis will be required. Professor Charles.

Prerequisite: Poultry Husbandry 1. Required of all Seniors in Poultry Husbandry. Elective for others. 1 hour conference; 1 semester credit.

SOCIOLOGY

Charles W. Coulter, *Professor*

Joseph E. Bachelder, Jr., *Instructor*

It is the aim of the department: (1) to develop in the student an understanding of the society in which he lives—its laws, processes, institutions and organizations, so that he may effectively function as a unit in the social order; (2) to provide for pre-professional and limited professional training in the methods and techniques of social work; (3) to provide a professional background for students preparing to teach sociology in secondary schools.

Requirements for a major in sociology—24 semester credits with a grade of 75 or better. Students electing a major are expected to include Principles of Sociology 1; Social Psychology 2; Methods of Social Progress 84, or Methods of Social Research 75; and at least 6 semester credits (depending on field of interest) of specified work in one or more of the following correlated departments: Economics, Political Science, History, Psychology, Home Economics or Zoölogy.

1. Principles of Sociology. A comprehensive study of the underlying laws of human society, especially those governing the origin,

growth and decline of institutions; group relationships to biological and geographic environments; social processes such as conflict, competition, imitation, accommodation, coöperation, assimilation and differentiation; societal isolation; culture, its organization, content, location and formation; social institutions including the familial, religious, economic, educational, recreational and political; social change with its attendant maladjustments, and social control. Mr. Bachelder.

3 lectures or recitations; 3 semester credits.

2. Social Psychology. An analysis of the social aspects of personality, of the process whereby the individual's impulses are defined by the cultural patterns of the group, of the processes by which one acquires the social world in which he lives, and of the factors which determine attitudes, wishes, habit systems, one's conception of himself and his social role. A critical discussion of the methods utilized at present for the study of human nature introduces the course. Professor Coulter.

3 lectures or recitations; 3 semester credits.

53. Cultural Anthropology and Ethnology. This course includes: (a) a comparative study of primitive folk-ways, institutions and social organization, marriage, economic activities, religion, property inheritance and folklore. An examination of the factors affecting culture and the principles of its development. The significance of primitive culture for an understanding of contemporary civilization; (b) a comparative study of peoples; environmental factors; societal effect of invasion, colonization, and linguistic fusions; race and class struggles; jingoism; race relations in mid-European territory and in the Far East; the problem of world peace. Professor Coulter.

Prerequisite: Sociology 1 and 2, or by special permission.
3 lectures or recitations; 3 semester credits.

54. The Immigrant and the Negro. An investigation of negro and immigrant heritage with special reference to the problems of

assimilation and Americanization. Attention is directed to intensive study of selected groups, the Negro, the Jew, the Italian, the Pole, the Greek, the French-Canadian, and the Japanese. Professor Coulter.

Prerequisite: Sociology 1 and 2, or by special permission. 3 lectures or recitations; 3 semester credits.

57. Rural Sociology. A study of the foundation materials of rural life; the physical setting—land, land-policies, land-tenure; land-economics; farm and village population—its composition, its changes; the income basis of rural life, the standard of living; rural habits, attitudes; rural groupings, arrangements, the mechanisms of communication and social control; a study of rural institutions with respect to welfare, sociability, education and religion. Mr. Bachelder.

Prerequisite: Sociology 1 and 2, or by special permission. 3 lectures or recitations; 3 semester credits.

60. Urban Sociology. A study of the changes in community life that have come with the shift of population from rural districts to the city; the factors involved in the rapid growth of cities since 1800; physical structure of the city, processes of internal growth; the segregation which makes of the city a mosaic of distinct cultural worlds; increase in mobility which multiplies social stimuli; typical areas within the city—foreign colonies, rooming house districts, apartment and hotel areas, outlying areas of homes; the effect of the city upon community life, the family, church, school, unorganized group behavior, attitudes and life organization of the person. Mr. Bachelder.

Prerequisite: Sociology 1 and 2. 3 lectures or recitations; 3 semester credits.

61. Social Pathology. A survey of personal, institutional and community disorganization. A study of the social factors involved in alcoholism, drug addiction, prostitution, poverty, vagrancy, juvenile and adult delinquency, divorce and desertion; and instances of the break-down of public opinion, and of community, family, religious and legal sanctions as forces for social control. A consideration of remedial measures based upon a discussion of human nature and the

physical conditions of modern life. Especially recommended for pre-medical, pre-legal, and other students who will be handling social variants in the field of their professions. Mr. Bachelder.

Prerequisite: Sociology 1 and 2. 3 lectures or recitations; 3 semester credits.

62. Community Organization. A study of town and country community organization with respect to natural and interest groupings and with respect to relationships between town and country; the survey; methods of analyzing problems of community organization; methods of utilizing institutions and equipment in the development of programs and organizations for health, recreation, general welfare and control. Mr. Bachelder.

Prerequisite: Sociology 1 and 2, or by special permission. 3 lectures or recitations; 3 semester credits.

71. Crime and Its Social Treatment. A brief presentation of the increase and extent and more popular theories of crime: delinquency, juvenile and adult. Case studies of disorders of conduct and of the criminal behavior of individual delinquents with special reference to the influence of family and neighborhood environments; typical social situations and their influence upon specific types of delinquency; programs for the social treatment of crime, the reorganization of reformatory institutions, classification of offenders for separate treatment, the "honor system," limited self-government, parole and probation, and the juvenile court as agencies for the prevention of delinquency. Professor Coulter.

Prerequisite: Sociology 1 and 2, or by special permission. 3 lectures or recitations; 3 semester credits.

72. The Family. The rise of the marriage institution and the family. Modern problems of the family: divorce, desertion, changing status of women, child welfare, child labor laws, and related problems. Professor Coulter.

Prerequisite: Sociology 1 and 2, or by special permission. 3 lectures or recitations; 3 semester credits.

75. Methods of Social Research. A study of the methods of science and research, the prospects of the social sciences, and the application of the historical, survey, statistical and case methods to social data. Emphasis is also given to the procedure involved in making social studies, i. e., the use of bibliography, definition and selection of the problem, determination of the data needed, collection and arrangement of the data for presentation and exposition. Mr. Bachelder.

Prerequisite: Sociology 1 and 2. 3 lectures or recitations; 3 semester credits.

76. Principles of Social Case Work. An analysis of the present trend in family case work; consideration of the techniques of interviewing, diagnosis, treatment and case recording; the significance of present day relief practices. Mr. Bachelder.

Prerequisite: Sociology 1 and 2. 3 lectures or recitations; 3 semester credits.

83. Social Work Organization and Administration. The field of contemporary social work, its scope, functions, standards, education, specialization and trend. Types of administration including the history, program, machinery, and personnel problems of state and private organizations, the place and use of volunteers, professional standing and accrediting. Professor Coulter.

Prerequisites: Sociology 1, 2, 61, and 62. 3 lectures or recitations; 3 semester credits.

84. Methods of Social Progress. A study of efforts to improve social conditions and attain a larger measure of social justice. Community experiments. The development of modern social legislation. The application of the principles of insurance to social problems. Various forms of mutual aid and of philanthropy. Endowments and special foundations. Professor Coulter.

Prerequisite: Sociology 1 and 2. 3 lectures or recitations; 3 semester credits.

87. The Church in American Society. Contemporary organizations for worship in the community, their correlation, functions, and

problems. The rise of the Church and its relation to Labor, the State, school, social welfare agencies; significance to the community of its organization and financing. Church federation and union. Professor Coulter.

Prerequisite: Sociology 1 and 2. 3 lectures or recitations; 3 semester credits. (Not offered in 1937-38)

88. Recreation and Leisure. Problems arising from the increase of leisure time in modern society; typical leisure time activities; theories of play; practical training programs in recreation.

A study of the function of leadership in this connection; analysis of types and qualities of leadership as exhibited by typical leaders; a consideration of the material and program of leadership training. Mr. Bachelder.

Prerequisite: Sociology 1 and 2. 3 lectures or recitations; 3 semester credits.

89, 90. Development of Sociological Thought. The history of sociological thought, with special reference to the writings of Comte, Spencer, and the later writers of the nineteenth century; a comparison of contemporary sociological systems. Professor Coulter.

Prerequisite: Sociology 1 and 2. 89 prerequisite for 90. 3 lectures or recitations; 3 semester credits. (Not offered in 1937-38)

95, 96. Sociological Research. A seminar for conference and reports on research projects arranged for graduates and Seniors who have completed major work in sociology. Professor Coulter and Mr. Bachelder.

Prerequisite: Sociology 75 and 84. 3 meetings; 3 semester credits.

97, 98. Social Service and Field Work. A course designed to give the student practical experience in social work. Field work is done in connection with neighboring social agencies, and is supplemented by readings, lectures and conferences. Professor Coulter.

The course may be taken during the college year for 3 credits each semester, or during the summer in connec-

tion with certain approved settlements, correctional institutions, or case work agencies. Eight weeks' summer residence with an agency is required, for which a maximum of 6 semester credits is given.

Prerequisite: Sociology 76.

ZOOLOGY

C. Floyd Jackson, *Professor*
Alma D. Jackson, *Associate Professor*
Edythe T. Richardson, *Assistant Professor*
Ruth E. Thompson, *Instructor*
Clyde W. Monroe, *Instructor*
Eleanor L. Sheehan, *Instructor*
W. Robert Eadie, *Instructor*

Students majoring in zoölogy will ordinarily find it desirable to elect courses in botany and chemistry. If the objective is the teaching of biology, a combined major in botany and zoölogy will be allowed. Such students should complete the Freshman courses in these subjects as early in their curricula as possible.

1, 2. Principles of Zoölogy. An elementary study of the principles of life, its development, structural basis and physiological activity. The course is continuous throughout the year. This course is intended to give a practical knowledge of animal life, and is required of all pre-medical students and others intending to major in the Department of Zoölogy. Professor Jackson, Miss Thompson, Mr. Monroe, Miss Sheehan and Mr. Eadie.

Prerequisite: 1 prerequisite for 2. Freshman course. 3 lectures or recitations; 1 laboratory; 4 semester credits.

3, 4. Hygiene and Sanitation. A detailed study of the principles of health preservation. The course deals with hygiene of digestion,

muscular hygiene, neural hygiene, and various other important physiological processes affecting health. The latter half of the work is devoted to a study of food, water, and general sanitation, and the control of bacterial disease. The course is continuous throughout the year. Mr. Monroe.

Prerequisite: One year of Zoölogy. 3 prerequisite for 4. 3 lectures or recitations; 3 semester credits.

5, 6. Evolution and Eugenics. Lectures and assignments dealing with the various problems of evolution and their relation to human life. Evidence of man's origin based on anatomical, embyronic, and paleontological data will be discussed. This will be followed by a consideration of the chief problems of eugenics. Miss Thompson.

Prerequisite: Two years of Zoölogy. 5 prerequisite for 6. 3 lectures or recitations; 3 semester credits.

7, 8. Ecology. A study of general ecological principles as applied to vertebrate animals. Types of habitats with the characteristic vertebrate associations occurring in each, and the relation of the animals to the environment will be considered.

Prerequisite: Permission of the instructor. 7 prerequisite for 8. 3 lectures or discussions; 1 laboratory; 4 semester credits. (Given in alternate years; not offered in 1937–38)

15, 16. Comparative Anatomy of the Vertebrates. A comparative study of the anatomy of vertebrate animals. Laboratory dissections are made of each type. Mr. Eadie.

Prerequisite: Zoölogy 2. 15 prerequisite for 16. Sophomore course. 1 lecture; 2 laboratories; 3 semester credits.

17, 18. Human Anatomy and Physiology. A survey of the structure and function of the human body, with a detailed study of the different systems. Collateral readings, written reports and conferences required. Assistant Professor Richardson.

Prerequisite: Zoölogy 2. 17 prerequisite for 18. 3 lectures; 3 semester credits. (3 lectures; 1 laboratory; 4 semester credits—for majors in Physical Education for Women only.)

ADVANCED COURSES

51, 52. Invertebrate Zoölogy. A study of the structure, habits, and ecological relationships of the different groups of invertebrate animals.

Given at the Isles of Shoals Marine Laboratory during the summer session.

53, 54. Histology. A study of the microscopical anatomy of the human body. The slides used in the laboratory are correlated with the class work. The course is of special value to pre-medical students and majors in Zoölogy. Associate Professor Jackson and Mr. Monroe.

Prerequisite: Two years' work in Zoölogy and permission of the instructor. 53 prerequisite for 54. 3 lectures or recitations; 1 laboratory; 4 semester credits.

55, 56. Embryology. The study of type forms illustrating the fundamental principles of the embryonic development of animals. The course is of special value to pre-medical students and majors in Zoölogy. Associate Professor Jackson and Mr. Monroe.

Prerequisite: Three years' work in Zoölogy and permission of the instructor. 55 prerequisite for 56. 3 lectures or recitations; 1 laboratory; 4 semester credits.

57, 58. Laboratory Technique. A general laboratory course in the methods used in the preparation of zoölogical material, microscope slides, mounting embryos, making serial sections, etc. Will be adapted to individual needs as far as possible. Associate Professor Jackson and Mr. Monroe.

Prerequisite: Permission of the instructor. 57 prerequisite for 58. 1 lecture; 2 laboratories; 3 semester credits.

59, 60. Advanced Physiology. An advanced study of human physiology with special emphasis on nutrition, circulation, respiration, excretion and secretion. The work will consist of lectures, assigned topics and laboratory experiments. Assistant Professor Richardson.

Prerequisite: Two years' work in Zoölogy. 59 prerequisite for 60. 3 lectures or recitations; 3 semester hours, (3 lectures or recitations; 1 laboratory; 4 semester credits, by permission of the instructor.)

61, 62. Cytology and Genetics. A detailed study of the cell, including morphology, the chemical and physical nature of protoplasm, mitosis, meiosis, syngamy, and related phenomena leading up to the physical basis of inheritance and the study of Mendel's laws, the expression and interaction of the genes, linkage, sex and its inheritance, the inheritance of quantitative characters, and the types and causes of variations. Assistant Professor Richardson.

Prerequisite: Two years' work in Zoölogy. 61 prerequisite for 62. 3 lectures or recitations; 1 laboratory; 4 semester credits. (Given in alternate years; not offered in 1937–38)

63, 64. Neurology. A comparative study of the nervous systems of the lower animals and a detailed study of the morphology, physiology, and histology of the human nervous system. This subject is intended to give a practical knowledge of the nervous system and its operation. Assistant Professor Richardson.

Prerequisite: Two years' work in Zoölogy. 63 prerequisite for 64. 3 lectures or recitations; 1 laboratory; 4 semester credits. (Given in alternate years; offered in 1937–38)

Biology–Education (Bi–Ed) 91. Problems in the Teaching of High School Biology. Materials and methods in presenting the subject of biology in secondary schools and introductory college courses will be discussed. There will also be a general survey of the field of biology for the purpose of correlating the various lines of work previously studied.

Given at the Isles of Shoals Marine Laboratory during the summer session.

EDUCATION–ZOÖLOGY (ED–ZOÖL) 93, 94. SUPERVISED TEACHING IN ZOÖLOGY. Qualified students will be allowed to teach under supervision in the Freshman laboratory. The course will include a review of general zoölogy and will be an introduction to teaching for zoölogy students. Students planning to teach biology should supplement this course with similar work in the Department of Botany. Students who desire to take supervised teaching in high schools may elect 94 as 6 credits under the usual regulations of the Department of Education.

Prerequisite: Senior standing and the permission of the instructor. 1 lecture or recitation; 1 or 2 laboratories; 2 or 3 semester credits.

97, 98. SPECIAL PROBLEMS AND SEMINAR. Seminar discussions on current zoölogical literature will be conducted each week. In addition, advanced students may elect a special problem provided they present a detailed outline of the subject which they wish to investigate and, furthermore, provided they can furnish adequate proof of their ability to carry the problem in view of their past training and the equipment available.

Prerequisite: Permission of the instructor. Graduate or undergraduate credit. Credits to be arranged.

SERVICE COURSES

48. GENERAL ZOÖLOGY. An elementary study of the principles of animal life, with a special emphasis on human anatomy and physiology, although the general principles of physiology, embryology and genetics as applied to all forms of animals will be discussed. Mr. Monroe.

Required of Sophomores in Agriculture. Open only to students in Agriculture. 3 lectures; 3 semester credits.

49. GENETICS. A detailed study of the physical basis of inheritance, laws governing Mendelian inheritance, and the application of such laws to plant and animal breeding. (Same content as 62.) For agricultural students. Assistant Professor Richardson.

2 lectures or recitations; 2 semester credits.

THE TWO-YEAR CURRICULUM IN AGRICULTURE

M. Gale Eastman, *Dean*

The Two-Year Curriculum in Agriculture, established in 1895, affords a splendid opportunity for the farm boys of the state to acquaint themselves with the fundamental principles and with the latest and most approved practices of agriculture. This curriculum is arranged especially for the young men who wish to make a business of dairying, livestock raising, poultry, horticulture or general farming, but who do not have the time, money or preparation to take a regular four-year curriculum.

All required courses in the two-year curriculum are separate and distinct from those of the four-year curricula, but some electives are allowed from four-year courses. The work includes training in botany, chemistry, English, and zoölogy as fundamental to the study and interpretation of information dealing with the successful production of plants and animals on the farm. To such a background of science and culture through the two years of work are added courses in the field of agriculture which will give as thorough and practical training as the limited time will permit. These agricultural courses include practice both in the laboratory and in the field. The facilities of the University's dairy barn, livestock barn, poultry plant, horticultural farm, and forest, as well as the milk pasteurizing, ice-cream, and apple storage and packing plants on campus, are always available for class work with students.

Military science is not required of two-year students, but any student desiring to take the course may elect it with the four-year students.

A student who meets the entrance requirements of the University may receive credit towards graduation from a four-year curriculum in the College of Agriculture for work completed with a grade of 75 or better in certain agricultural courses of the two-year curriculum.

Entrance Requirements.—The two-year curriculum is open to both young men and young women. The only entrance requirements are a common school education involving a reasonable knowledge of

reading, writing, spelling, arithmetic, English grammar, geography, and United States history. The curriculum is best adapted to students from 17 to 21 years of age. Older students frequently take the curriculum, but younger ones are not encouraged to enter.

Tuition and Fees.—The tuition for students who are residents of New Hampshire is $75 per year. For out-of-state students the tuition is $175 per year. One-half of the tuition is payable at the beginning of each semester.

Scholarship.—The University grants to residents of New Hampshire a limited number of scholarships which cover the tuition charges. Students desiring to secure scholarships should apply to the Dean of the Faculty, Durham, N. H.

Expenses.—The expenses of this curriculum will vary with the tastes and frugality of the students. An estimate of the expenses for one year is as follows:

	High	*Average*	*Low*
Tuition	$175	$75	Free
Books	30	25	$22
Room	120	72	64
Board	200	200	175
Laundry	35	20	15
Incidentals	50	30	25
	$610	$422	$301

Farm Experience Requirement.—In order to graduate from this curriculum each student must present satisfactory evidence of having had practical experience in farm work, either through having worked on a farm for at least two years after he was 12 years of age, or through having worked on a farm for at least four months after he was 15 years of age.

Opening, Closing.—The curriculum for this year will open Monday, September 20, 1937, and will close Monday, June 13, 1938.

Two-year students are not required to attend Freshman Week, which begins September 14, 1937, but they may do so if they wish.

Certificate of Graduation.—No degree is given at the end of this period of study, but a "Certificate of Graduation" is presented upon the completion of the prescribed curriculum of 64 credits or its equivalent.

TWO-YEAR CURRICULUM IN AGRICULTURE

TWO-YEAR CURRICULUM

First Year

	First Semester Credits	*Second Semester Credits*
Convocation (*Required*)		
Phys. Ed. 1, 2	½	½
Agr. Chem. 201 (*General*)	4	
Agr. Econ. 201 (*Rural*)	2	
Agr. Eng. 202 (*Drawing*)		1
A. H. 202 (*Types and Breeds*)		3
Bot. 201 (*Elements*)	4	
D. H. 201 (*Farm Dairying*)	3	
Eng. 201, 202 (*Grammar and Composition*)	3	3
Hort. 202 or 214 (*Pomology or Vegetable Gardening*)		3
P. H. 202 (*Farm Poultry*)		3
Elective		2
	16½	15½

Second Year

Convocation (*Required*)		
Agr. Econ. 203 (*Farm Accounts*)	2	
Agron. 201, 202 (*Crops; Soils, Fertilizers*)	3	4
M. E. 202, 204 (*Forging; Carpentry*)		2
Ent. 202 (*Principles*)		2
For. 201 (*Farm Forestry*)	2	
Zoöl. 201 (*Physiology and Hygiene*)	2	
Elective	7	8
	16	16

Elective Courses*

Agr. Econ. 205, 204 (*Marketing; Farm Management*)	1	2
Agr. Eng. 203, 204 (*General; Power and Machinery*)	2	2
*A.H. 2 (*Judging*)		1
*A.H. 5, 6 (*Veterinary Science*)	3	3
*A.H. 7, 9 (*Animal Breeding; Horses and Beef Cattle*)	3	3
*A.H. 8 (*Markets*)		2
*A.H. 10 (*Sheep and Swine*)		3
A.H. 204 (*Feeds and Feeding*)		3
Bot. 202 (*Diseases*)		2
D.H. 203, 204 (*Manufacturing; Production*)	3	3
*Hort. 1 (*Harvesting and Marketing*)	3	
*Hort. 3 (*Judging*)	2	
*Hort. 13, 28 (*Vegetable Forcing; Landscape Gardening*)	3	3
*Hort. 39 (*Greenhouse*)	3	
Hort. 241, 242 (*Advanced*)	Arr.	Arr.
*P.H. 7, 6 (*Breeds and Judging; Breeding*)	3	3
*P.H. 9, 8 (*Marketing; Incubation and Brooding*)	2	3
*P.H. 10 (*Feeding*)		3
*P.H. 12, 13 (*Housing; Management*)	2	3
*P.H. 15 (*Diseases*)	4	

*Note: Numbers less than 200 indicate four-year courses, which may be elected by Two-Year students subject to the approval of the head of the department concerned. The passing grade for Two-Year students in these courses shall be 50.

DESCRIPTION OF COURSES OF TWO-YEAR CURRICULUM IN AGRICULTURE

AGRICULTURAL CHEMISTRY

201. Agricultural Chemistry. A study of the elementary principles of chemistry and of the chemistry of plants, soils, fertilizers, foods and animal physiology. Professor Phillips and Mr. Davis.

Required first year. 3 lectures or recitations; 1 laboratory; 4 semester credits.

AGRICULTURAL ECONOMICS

201. Rural Economics. Text book, lectures, and recitations on the development and significance of agricultural problems in our modern economy. Assistant Professor Grinnell.

Required first year. 2 lectures; 2 semester credits.

203. Farm Records and Accounts. Practice in methods of keeping accounts and records of the farm business and the practical interpretation of their summaries as affecting profits in farming. Assistant Professor Grinnell.

Required second year. 1 laboratory; 2 semester credits.

204. Farm Management. Lectures and practical problems concerning farming as a business. Types of farming, size of business, production, balance in organization, labor efficiency, cropping systems, farm layout, etc. Assistant Professor Grinnell.

Elective second year. 1 lecture; 1 laboratory; 2 semester credits.

205. Agricultural Marketing. A general discussion of the intricate marketing system with special reference to marketing functions, marketing agencies, and methods of sale. Some commodity

grades and standards investigated. Special phases of coöperative marketing developed. Assistant Professor Grinnell.

Elective second year. 1 lecture; 1 semester credit.

AGRONOMY AND AGRICULTURAL ENGINEERING

Agronomy

201. Field Crops. A study of the most important crops in New England with special emphasis on those of this state. Attention will be given to their history, value, production, management and use. The laboratory work will be as practical as possible, including identification in the laboratory and field, judging and farm seed testing. Assistant Professor Higgins.

Required second year. 2 lectures or recitations; 1 laboratory; 3 semester credits.

202. Soils and Fertilizers. A study of the physical, chemical and biological properties of soils and the fundamental considerations of soil management will be offered in the first half of the semester. The second half of the semester will cover fertilizers and farm manures, giving consideration to occurrence and function of plant food, care and use, and the response of crops to the same. Professor Prince and Assistant Professor Higgins.

Required second year. 3 lectures or recitations; 1 laboratory; 4 semester credits.

Agricultural Engineering

202. Agricultural Drawing. A course designed to meet the needs of the men directly engaged in agriculture, including practice in lettering, sketches of farm layouts, machine drawing and blue-print reading, and making plans for minor farm buildings. Assistant Professor Foulkrod.

Required first year. 1 laboratory; 1 semester credit.

203. Basic Agricultural Engineering Applications. Agricultural engineering methods applied to the solution of every-day farm

problems. Farm mechanics, farm mapping, farm sanitation and water supply, as well as types and purposes of farm buildings and their equipment, are covered in theory and demonstration. Assistant Professor Foulkrod.

Elective second year. 1 lecture; 1 laboratory; 2 semester credits.

204. Farm Power and Machinery. A course designed particularly for the manager or foreman. Selection, care, repair and methods of use of electrical equipment, field machinery, engines, light plants, motors and tractors, with special emphasis on adaptability to local conditions. Assistant Professor Foulkrod.

Elective second year. 1 lecture; 1 laboratory; 2 semester credits.

ANIMAL HUSBANDRY

202. Types and Breeds of Livestock. A study of the various breeds of horses, cattle, sheep and swine in respect to their origin, history, development, characteristics, and adaptability to different conditions of climate and soil. One afternoon each week is devoted to judging the different breeds. Professor Tirrell.

Required first year. 2 lectures or recitations; 1 laboratory; 3 semester credits.

204. Feeds and Feeding. An elementary study of the laws of nutrition, the character, composition, and digestibility of feed stuffs, and the methods of feeding different kinds of farm animals. Numerous samples of grain and by-products are used for the purpose of familiarizing the students with the different feed stuffs. Practice is given in calculating rations for various purposes. Professor Tirrell.

Elective second year. 3 lectures or recitations; 3 semester credits.

BOTANY

201. Elements of Botany. The student is given a succinct account of the form and structure of plants, and of how plants grow and feed. Mr. Dunn.

Required first year. 2 lectures or recitations; 2 laboratories; 4 semester credits.

202. Fungous Diseases of Plants. The principal fungous diseases of our cultivated plants, their cure and their prevention. Mr. Dunn.

Elective second year. 1 lecture; 1 laboratory; 2 semester credits.

DAIRY HUSBANDRY

201. Farm Dairying. A general study of milk and its products. Assistant Professor Moore.

Required first year. 2 lectures; 1 laboratory; 3 semester credits.

203. Manufacturing of Dairy Products. A study of the production, handling, and distribution of milk; manufacturing and distributing ice cream, butter, condensed milk, and other dairy products. Assistant Professor Moore.

Prerequisite: Dairy Husbandry 201. Elective second year. 2 lectures; 1 laboratory; 3 semester credits.

204. Dairy Production. The field of dairy husbandry in its relation to the producer. Care, feeding and management of dairy animals; dairy herd development; dairy cattle judging. Professor Morrow.

Elective second year. 2 lectures; 1 laboratory; 3 semester credits.

ENGLISH

201, 202. Grammar and Elementary Composition.

Required first year. 3 lectures or recitations; 3 semester credits.

ENTOMOLOGY

202. Principles of Economic Entomology. The relation of the structure and classification of insects to methods of insect control. The preparation and application of insecticides. Spray machinery and appliances. Professor O'Kane and Mr. Conklin.

Required second year. 1 lecture or recitation; 1 laboratory; 2 semester credits.

FORESTRY

201. Farm Forestry. The care and management of farm woodlots; log and board scaling; logging and milling; estimating standing timber; protection from fire, insects, fungi, etc.; thinning immature stands; seeding and planting; natural regeneration. Professor Woodward.

Required second year. 1 lecture or recitation; 1 laboratory; 2 semester credits.

HORTICULTURE

202. Elementary Pomology: Orchard and Small Fruits. A brief consideration of the principles and practice involved in orcharding and in the culture of the most important of the small fruits. Professor Potter.

Required of first-year students who do not take Horticulture 214. Elective for other students. 2 lectures; 1 laboratory; 3 semester credits.

214. Elementary Vegetable Gardening. A study of the home vegetable garden, and also of the methods used in commercial vegetable production. Associate Professor Hepler.

Required of first-year students who do not take Horticulture 202. Elective for other students. 2 lectures; 1 laboratory; 3 semester credits.

241, 242. Advanced Horticulture. Special work in any phase of horticulture may be taken by arrangement with the head of the department. Professor Potter and staff.

Prerequisites will depend upon the work taken. Elective second year. Hours and credits to be arranged.

MECHANICAL ENGINEERING

202. Forge Shop. This is a study of the forging of iron and steel, and is designed to teach the operations of drawing, upsetting, welding, twisting, splitting and punching. A study is made of the construction, care, and management of the forge, and instruction is given in tempering, case hardening and annealing. Mr. O'Connell.

Required second year. 1 laboratory; 1 semester credit.

204. Wood Shop. Farm carpentry and joinery. Care and use of tools, making of implements for the farm, and care of lumber on the farm. Mr. Batchelder.

Required second year. 1 laboratory; 1 semester credit.

POULTRY HUSBANDRY

202. Farm Poultry. A general course designed especially for two-year students who are going back to the farm to engage in practical poultry work. The course will include work in managing, feeding, housing, breeding, incubation, brooding and marketing, with laboratory work as practical as can be made. Mr. Tepper.

Required first year. 2 lectures; 1 laboratory; 3 semester credits.

ZOOLOGY

201. Elementary Anatomy and Physiology. A general survey of the structure of the human body, together with the study of the basic principles of animal life.

Required first year. 2 lectures or recitations; 2 semester credits.

NEW HAMPSHIRE AGRICULTURAL EXPERIMENT STATION

JOHN C. KENDALL, *Director*

The New Hampshire Agricultural Experiment Station, a branch of the University, was established by the state, August 4, 1887, under an act of Congress of March 2 of that year. This and subsequent acts appropriated funds for conducting research work on agricultural problems in New Hampshire and throughout the nation.

The investigations conducted by the Experiment Station vary according to their nature, some lasting through one season only and some covering a period of years. The projects of the Station now include ninety-five fundamental investigations to determine the underlying principles of agricultural science and others of more practical application.

Appropriations from the state also enable the Experiment Station to conduct a limited amount of state service work on agricultural problems. Advantage of the opportunities offered by the Experiment Station has been taken by the state in connection with the tests of seeds, fertilizers, and feeding stuffs; and samples of these collected by the State Department of Agriculture are tested at the Station laboratories each year, in accordance with legislative enactments.

Information relating to agricultural practices is supplied by the various departments and entails a large volume of correspondence in answer to individual inquiries. Samples of soil are tested; plants and insects are identified; blood samples from hens are tested, and *post mortem* examinations of animals made.

The library of the Experiment Station, which is open daily to students and visitors, contains complete files of all bulletins issued by the experiment stations in other states, all United States Department of Agriculture bulletins, and many other reports, bulletins and records as well as books of agricultural value.

Publications of the Station comprise 294 bulletins of the regular series and 51 circulars, 66 technical bulletins, 51 scientific contributions and 4 school bulletins. The publications cover a wide range of subjects and contain the information gathered by the experts of the Station while working on the various projects. The bulletins are issued at regular intervals, and notices of publications are sent to all residents of New Hampshire requesting them.

UNIVERSITY OF NEW HAMPSHIRE EXTENSION SERVICE
(AGRICULTURE AND HOME ECONOMICS)

JOHN C. KENDALL, *Director*

What the colleges and universities are to those young men and women who come within their walls, the Extension Service is, only to a lesser degree, to the thousands who are beyond the reach of the classroom.

The teachings of the college and the findings of the Experiment Station and the United States Department of Agriculture are now being carried to farms and homes throughout the state by a regularly established force of field workers. A coöperative arrangement was first made possible in 1914 between the United States Department of Agriculture, the state college and the counties of the state by the Smith-Lever Act of Congress, which appropriated funds to be offset by each state. This arrangement was extended by the State Legislature of 1925, which passed a special extension appropriation for county work, and by the Capper-Ketcham and other supplementary acts of Congress. There are now ten agricultural agents in the ten counties, ten home demonstration agents, and ten boys' and girls' club agents, five assistant agents, and two agents-at-large. Farm management, dairying, forestry, soils and crops, poultry, horticulture, marketing, engineering, nutrition, clothing and home management demonstrations are also conducted, with specialists in charge.

The Extension Service works largely through a group of rural people known as the Farm Bureau, one of which has been formed in each county. With its corps of fifty-eight men and women the Extension Service relieves the college teaching staff and station workers from much of the miscellaneous extension work which they handled in the past. It also carries the work to a much larger public and carries it in a much more intimate way than it would otherwise be possible to do.

The publications of the Extension Service comprise 176 press bulletins, 194 circulars, and 50 bulletins. Notices of new bulletins are sent to a mailing list, which is maintained in coöperation with the Experiment Station. Bulletins are sent free to all who request them.

Reading courses in fifteen subjects in agriculture and home economics, prepared by members of the resident college staff, are offered during the winter months.

DEGREES AND HONORS, 1936

At the Sixty-Sixth Annual Commencement Exercises, Monday, June 15, 1936, at which President Kenneth C. M. Sills, A.M., LL.D., of Bowdoin College, made the Commencement address, Acting President Roy D. Hunter conferred the following degrees and certificates:

ADVANCED DEGREES

Master of Arts

In English:

Mary Alice Herendeen Flocken, B.S., Wm. Smith College, 1921, Katonah, N. Y.

In History:

Kenneth Leslie Deene, B.S., Univ. of New Hampshire, 1935, Exeter, N. H.

Edna Frances Dickey, B.A., Univ. of New Hampshire, 1935, Salem Depot, N. H.

Bernice Clementine Roe, B.A., Univ. of Delaware, 1932, Dover, N. H.

Alexander Mark Sulloway, B.S., Univ. of New Hampshire, 1935, Berlin, N. H.

Joseph Bassett Williams, B.A., Univ. of New Hampshire, 1926, Exeter, N. H.

In Languages:

Shirley Elizabeth Baldwin, B.A., Univ. of New Hampshire, 1935, East Kingston, N. H.

Barbara May Clough, University of Paris, 1933, Lebanon, N. H.

Paul Hubert Phaneuf, Ph.B., Holy Cross College, 1935, Nashua, N. H.

Lorraine Estelle Raitt, B.A., Univ. of New Hampshire, 1935, Derry, N. H.

In Social Studies:

William Coleman Chamberlin, B.A., Yale University, 1933, Durham, N. H.

Emerson Grabill Hangen, A.B., Albright College, 1922, Portsmouth, N. H.

Mary M. Lowney, B.S., Montana State College, 1933, Los Angeles, Cal.

Carroll Elwyn Mathews, B.A., Univ. of New Hampshire, 1935, Rochester, N. H.

Maurice James Moriarty, B.A., Univ. of New Hampshire, 1935, Durham, N. H.

Master of Education

Cecil Webster Boodey, B.A., Univ. of New Hampshire, 1921, Yonkers, N. Y.

Anna Bean Brown, B.S., University of Maine, 1908, Wentworth, N. H.

Mildred Linfield Doyle, B.S., Univ. of New Hampshire, 1935, Concord N. H.

Lee Blanchard Henry, B.A., Amherst College, 1935, South Norwalk, Conn.

Harold Irving Leavitt, B.S., Univ. of New Hampshire, 1921, Durham, N. H.

Gladys Emerson MacPhee, B.S., Simmons College, 1916, Bristol, N. H.

Harold Edgar McGrath, B.S., Wesleyan University, 1918, West Haven, Conn.

Edith Stearns Morrill, B.S., Simmons College, 1916, Manchester, N. H.

Willard Irving Rowe, A.B., Harvard University, 1910, Exeter, N. H.

John Murray Stevens, B.S., Holy Cross College, 1931, Portsmouth, N. H.

UNIVERSITY OF NEW HAMPSHIRE

Master of Science

In Chemistry:

Roger Morton Doe, B.S., Univ. of New Hampshire 1934, Dover, N. H.

Grace Lorene Ernst, B.S., Univ. of New Hampshire, 1935, Manchester-by-the-Sea, Mass.

Roger Davis Gray, B.S., Univ. of New Hampshire, 1934, Dover, N. H.

Lemuel Dary Wright, B.S., Univ. of New Hampshire, 1935, Nashua, N. H.

In Geology:

Ruth Helen Johnson, B.S., Univ. of New Hampshire, 1934, East Jaffrey, N. H.

In Zoölogy:

Roger Paul Brassard, B.S., Univ. of New Hampshire, 1935, Laconia, N. H.

Catherine Dorothy Calnan, B.S., Univ. of New Hampshire, 1933, Reed's Ferry, N. H.

BACCALAUREATE DEGREES (312)

BACHELOR OF SCIENCE

College of Agriculture (25)

Name	Course	P.O. Address
Phillips Brooks Badger	*D.H.*	*Portsmouth*
*David Calvin Barton	*For.*	*Durham*
Walter Elmer Brown	*For.*	*Concord*
Byron Earle Colby	*A.H.*	*West Lebanon*
Philip Gignac Couture	*Ent.*	*Laconia*
Clark Albert Craig	*P.H.*	*Antrim*
Robert Gale Dustin	*For.*	*Keene*
Waino William Elgland	*Ent.*	*West Concord*
Edward Wilbur Foss	*Gen.*	*Laconia*
Sewell Willobe Gilman	*T.Tr.*	*Walpole*
Harry Kydd Gouck	*Ent.*	*Andover, Mass.*
Ernest Wilson Gould	*For.*	*Hinsdale*
Walter Stanley Hale	*P.H.*	*East Rindge*
Robert Newton Hayden	*D.H.*	*Brookline*
George Moore Keith	*Hort.*	*Dover*
George Elwin Kerr	*Gen.*	*Dover*
Arthur Edwin Mitchell	*Hort.*	*Freedom*
Herman Wendell Parker	*Gen.*	*Exeter*
*Henry Edson Roberts	*D.H.*	*South Royalton, Vt.*
John Tolman Spear	*P.H.*	*South Acworth*
Robert Francis Stevens	*Hort.*	*Medfield, Mass.*
Paul Carlton Traver	*T.Tr.*	*Raymond*
*Earl Haven Tryon	*For.*	*Durham*
Bruce Varney	*P.H.*	*Stratham*
Walter Drury Weeks	*Hort.*	*Laconia*

UNIVERSITY OF NEW HAMPSHIRE

College of Liberal Arts (145)

NAME	COURSE	P.O. ADDRESS
Frank Russell Abbott	*Gen. Bus.*	*Peterborough*
Ralph Edmund Abbott	*Geol.*	*Wolfeboro*
Francis Thomas Ahern	*Educ.*	*Manchester*
Bertha Blanche Ashley	*H.E.I.*	*Windsor Locks, Conn.*
Thomas Wheelock Atherton	*Gen. Bus.*	*West Lebanon*
Raymond Irvin Beal	*Educ.*	*Portsmouth*
Byard Charles Belyea	*Pre-Med.*	*Dover*
Richard Henry Bienvenue	*Zoöl.*	*Manchester*
Eleanora Doris Boston	*P.E.*	*Dover*
Arline Eleanor Brazel	*Zoöl.*	*Hartford, Conn.*
Ben Richard Bronstein	*Pre-Med.*	*Manchester*
Paul Frederick Brooks	*Educ.*	*Greenfield*
Barbara Rand Brown	*Educ.*	*Deerfield*
Jessie Mildred Bunker	*H.E.*	*Kingston*
William Franklin Burnham, Jr.	*Econ.*	*Durham*
Sheffield Smith Campbell	*Educ.*	*Enfield*
Winnifred Abbott Carlisle	*H.E.*	*Concord*
Jeremiah Allen Chase	*Educ.*	*Seabrook*
Richard Irving Clark	*Gen. Bus.*	*Rochester*
Elizabeth Rose Corbett	*P.E.*	*Concord*
John William Coyne, Jr.	*Econ.*	*Manchester*
*William Dyer Crandall	*Pre-Med.*	*Northwood Narrows*
*Evelyn Frances Craton	*P.E.*	*Hillsboro*
Gilbert Wallace Crosby	*Geol.*	*Alton*
Edward Henry Currier	*Educ.*	*Pelham*
Herbert Stanley Currier	*Econ.*	*Pelham*
Albert Victor Cutter	*Pre-Med.*	*Pelham*
**Ruth Davenport	*Econ.*	*South Danbury*
Madeleine Davol	*Zoöl.*	*Manchester*
Edna Lougee Dearborn	*Zoöl.*	*Laconia*
Henry Demers	*Educ.*	*Manchester*
Loretto Genevieve Dolan	*Educ.*	*Nashua*
Chesley Folsom Durgin	*Gen. Bus.*	*Newmarket*
Emid Daniel Elgosin	*Pre-Med.*	*Whitefield*
Grace Hildreth Evans	*H.E.*	*Waltham, Mass.*

Name	Course	P.O. Address
Montgomery Farrington	*Econ.*	*Portsmouth*
**Jesse Bryan Flansburg	*Educ.*	*Manchester*
Robert Knowlton Foster	*Gen. Bus.*	*Walpole*
Antoine Arthur Fournier	*Educ.*	*Somersworth*
Beatrice Fuller	*P.E.*	*Lancaster*
Mary Garvin	*H.E.*	*Sanbornville*
Kennard Entwistle Goldsmith	*Educ.*	*Portsmouth*
Doris Ruberta Goodwin	*Zoöl.*	*Piermont*
Alice Mary Gould	*Pre-Med.*	*Manchester*
Gladys Hoagland Granville	*P.E.*	*Madison*
John Greene	*Geol.*	*Windham*
Dorothy Jeannette Grimes	*Econ.*	*Dover*
Harold Haller	*Educ.*	*Dover*
Robert Gould Hamlin	*Gen. Bus.*	*Concord*
Roland Gott Hamlin	*Econ.*	*Manchester*
Russell Sanborn Hanson	*Zoöl.*	*Tilton*
Jasper Joseph Harding	*Gen. Bus.*	*West Lebanon*
Priscilla Frances Hartwell	*Educ.*	*Brockton, Mass.*
Alice Janet Hazlett	*Educ.*	*Durham*
*Helen Henderson	*Zoöl.*	*Durham*
Maurice Kendall Herlihy	*Gen. Bus.*	*Wilton*
Mary Wright Holmes	*H.E.*	*Winchester, Mass.*
Henry Lloyd Hooper	*Ent.*	*Rochester*
Edward Orton Hubbard, Jr.	*Pre-Med.*	*Peterborough*
Duncan Upham Hunter	*Econ.*	*West Claremont*
Donald Earl Huse	*Econ.*	*North Sutton*
Robert Francis Jeannotte	*Educ.*	*Nashua*
Eva Ellen Johnson	*Educ.*	*Whitehall, N. Y.*
Delmar Faunce Jones	*Econ.*	*Franconia*
Leslie Eugene Jones	*Pre-Med.*	*Goffstown*
Mary Letitia Kennon	*Soc.*	*Meredith*
William Foster Kidder	*Econ.*	*New London*
William Richard Kimball	*Gen. Bus.*	*Andover, Mass.*
Gertrude Dorothea Knott	*Zoöl.*	*Portsmouth*
Robert Ernest Lamy	*Gen. Bus.*	*Rochester*
Raymond Valmore LeBel	*Chem.*	*Somersworth*
*Maurice Eugene LeRoy	*Gen. Bus.*	*Stratham*

Name	Course	P.O. Address
Everett Fisher Lombard	*Pre-Med.*	*Short Falls*
Richard Ryder Loring	*Gen. Bus.*	*East Norwalk, Conn.*
Stephanie Dorothea Lowther	*Zoöl.*	*Manchester*
Austin Joseph McCaffrey	*Educ.*	*Lincoln*
Daniel Francis McCarthy	*Pre-Med.*	*Dover*
Mary Evelina McCarthy	*Zoöl.*	*Manchester*
Kenneth Kimball McKiniry	*Educ.*	*Kearsarge*
Dorothy Margaret McLaughlin	*H.E.*	*Greenland*
Natalie Agnes McLaughlin	*H.E.*	*Durham*
James George McLeod	*Educ.*	*Laconia*
Warren Elmer Marshall	*Gen. Bus.*	*Manchester*
Ernest Roland Maynard	*Zoöl.*	*Nashua*
Nettie Alice Maynard	*H.E.*	*South Deerfield*
Joseph Lewis Miller, Jr.	*Econ.*	*Durham*
Eleanor Ruth Mitchell	*H.E.I.*	*Exeter*
Edwin Francis Moody	*Educ.*	*Lebanon*
Byron Harvey Moore	*Econ.*	*Manchester*
Natalie Richardson Mower	*H.E.*	*Lebanon*
Mary Alexine Mulligan	*Soc. Serv.*	*Dover*
Thomas Paul Nangle	*Pre-Med.*	*Rochester*
John Lewis Newsky	*Gen. Bus.*	*Dover*
Robert Edward Nixon	*Gen. Bus.*	*Newfields*
Louis Vincent Orgera	*Educ.*	*Stamford, Conn.*
John Henry Palmer	*Educ.*	*Rochester*
Ronald Ray Pariseau	*Econ.*	*Newport*
Alvin Howell Parker	*Econ.*	*Attleboro, Mass.*
Clifford LeRoy Parkinson	*Gen. Bus.*	*Salem*
Guy Anthony Pederzani	*Gen. Bus.*	*Nashua*
John Henry Perkins, Jr.	*Econ.*	*Pittsfield*
Mildred Florence Peterson	*P.E.*	*Portsmouth*
Marjorie Stevens Phillips	*H.E.*	*Lynn, Mass.*
Maurice Chapman Pike, Jr.	*Gen. Bus.*	*Portsmouth*
Leon Anthony Ranchynoski	*Educ.*	*Nashua*
Norman James Randell	*Soc.*	*Amesbury, Mass.*
Ralph Kelsey Reed	*Econ.*	*Durham*
Edward Macaulay Rogers	*Educ.*	*Durham*
Aino Alice Rosander	*Soc.*	*New Ipswich*

Name	Course	P.O. Address
Charles Irving Rowell	*Gen. Bus.*	*Newport*
Flora Sanborn	*H.E.*	*Brentwood*
Helen Pauline Seaward	*Educ.*	*Manchester*
Clarence Philip Shannon	*Zoöl.*	*Durham*
Ruth Elaine Shapleigh	*H.E.*	*Kittery, Maine*
Claud William Sharps	*Zoöl.*	*Orford*
Millicent Mae Shaw	*H.E.*	*Tilton*
Richard Shuman	*Pre-Med.*	*Dover*
*Caroline Eleanor Smith	*Econ.*	*Durham*
Pauline Georgiana Spear	*Pre-Med.*	*Derry*
Grace Mildred Stearns	*Educ.*	*Manchester*
Martha Meriden Stevens	*H.E.*	*North Stratford*
**Samuel Arthur Stone	*Math.*	*Claremont*
George Harding Sumner	*Econ.*	*Portsmouth*
Edwin William Robert Swett	*Econ.*	*Nashua*
Joseph William Symonovit	*Econ.*	*Pelham*
James Birney Tatem	*Econ.*	*Durham*
Miriam Madelon Taylor	*H.E.*	*Hinsdale*
Florence Marion Tebbetts	*Educ.*	*Pittsfield*
Robert Wayne Thayer	*Educ.*	*Berlin*
Anna Lotta Thompson	*Educ.*	*Whitefield*
*Frank Dillon Thompson	*Pre-Med.*	*Pittsfield*
William Joseph Thompson	*Econ.*	*Hampton*
Philip Henry Trowbridge	*Econ.*	*Durham*
Robert Baxter True	*Gen. Bus.*	*Fremont*
Ransom Edward Tucker	*Pre-Med.*	*Warren, Vt.*
Frances Evelyn Tuttle	*H.E.I.*	*Peterborough*
Guy Robert Vitagliano	*Bot.*	*Concord*
David Kimball Webster	*Pre-Med.*	*Concord*
Carolyn Pemberton Welch	*Educ.*	*Andover*
Normal Edmund Welch	*Gen. Bus.*	*Penacook*
Albert Munroe Wilcox, Jr.	*Econ.*	*Effingham*
Marshall Peterson Wilder	*Geol.*	*Peterborough*
George Clayton Williams	*Educ.*	*Candia*
Israel Wiseman	*Zoöl.*	*Dover*
David Nathan Yaloff	*Educ.*	*Laconia*

College of Technology (65)

Name	Course	P.O. Address
Donald William Avery	*Chem.*	*Plymouth*
Robert Gaius Barrett	*Chem.*	*Franklin*
Gordon Henry Bassett	*Chem.*	*Marlboro*
John Daniel Betley	*Arch.*	*Manchester*
*Arthur William Bryan	*Chem.*	*Wilton*
Paul Nicholas Caros	*Arch.*	*Nashua*
Richard Thayer Carrico	*M.E.*	*Port Washington, N.Y.*
Robert Lee Cochran	*M.E.*	*Andover*
Joseph Frederick Comolli	*E.E.*	*Concord*
Joseph Vincent Conroy	*C.E.*	*Manchester*
Herbert Bayley Cowden	*Chem.*	*Durham*
Edward Wright Cronin	*Chem.*	*Manchester*
Earle Josiah Davis	*C.E.*	*Auburn*
Joseph Shepherd Dorsey	*E.E.*	*Laconia*
Laurent Oscar Dubois	*Chem.*	*Pequaket*
Cecil Frederic Ellingwood	*C.E.*	*Newport*
Robert Henry Elliott	*Chem.*	*Concord*
George Orsfield Goddard	*E.E.*	*Ashland*
*Shubel Carpenter Haley	*E.E.*	*Dover*
Richard Tutherly Haubrich	*Chem.*	*Claremont*
Parker Edward Holt	*M.E.*	*South Lyndeboro*
**Fred Willis Hoyt, 3rd	*Chem.*	*Weirs*
Nicholas Isaak	*Arch.*	*Manchester*
Leo Edward Jositas	*Arch.*	*Nashua*
Charles Sumner Joslin	*M.E.*	*Durham*
Wallace Larkin Kimball	*M.E.*	*Derry*
John William Kurtti	*M.E.*	*New Ipswich*
William Judson Locke	*C.E.*	*Kittery, Maine*
Allan Winthrop Low	*Chem.*	*Durham*
William Lucinski	*C.E.*	*Nashua*
Donald Edward MacFadyen	*Chem.*	*Dover*
*Earle Lester MacKay	*E.E.*	*Concord*
Robert James McNally	*M.E.*	*Concord*
*John Thomas Maddock	*Chem.*	*Salem*
*Wilbur Hobart Miller	*Chem.*	*Raymond*

Name	Course	P.O. Address
Claude Vernom Morse	*M.E.*	*Keene*
Everett Reed Munson	*Arch.*	*Concord*
Roy Carter Norton, Jr.	*M.E.*	*Kittery Point, Maine*
Roland Higginson O'Neal	*E.E.*	*Hinsdale*
Samuel Rufus Page	*C.E.*	*Tilton*
Richard Patterson Parker	*C.E.*	*South Merrimack*
Kenneth Raymond Philbrick	*M.E.*	*Rye*
Warren Abbott Phillips	*C.E.*	*East Candia*
Clayton Robert Plumer	*Arch.*	*Lochmere*
Clyde Duane Prince	*C.E.*	*Andover*
Leo Paul Provost	*Arch.*	*Manchester*
Milburn Loring Richards	*Arch.*	*Millinocket, Maine*
*Ralph Whitney Robbins	*M.E.*	*Keene*
James Miller Robinson	*Chem.*	*Antrim*
Milton Jack Rosen	*C.E.*	*Portsmouth*
William Henry Sanborn	*M.E.*	*Seabrook*
Ray Maxwell Sargent	*E.E.*	*Milford*
William Fred Schipper	*C.E.*	*Portsmouth*
Curtis Willard Schricker	*Chem.*	*Goffstown*
Donald Barker Seavey	*C.E.*	*Milford*
James Lawson Shields, Jr.	*C.E.*	*Reading, Pa.*
Seth Urban Shorey	*Chem.*	*Lancaster*
*Herbert Ernest Silcox	*Chem.*	*Durham*
Morgan Andrew Stickney	*M.E.*	*Plymouth*
Charles Stockman Tarr	*C.E.*	*East Wolfeboro*
Edgar Stanley Thompson	*Chem.*	*Laconia*
Alvah Glidden Tinker	*C.E.*	*Nashua*
Albert Gallagher Welch	*M.E.*	*Goffstown*
Elmer Perley Wheeler	*Chem.*	*Concord*
Dexter Charles Wright	*M.E.*	*Nashua*

UNIVERSITY OF NEW HAMPSHIRE

BACHELOR OF ARTS

College of Liberal Arts (77)

Name	Course	P.O. Address
*Robert Rettig Anderson	*French*	*Milton Mills*
*Eleanor Kathleen Arkell	*Latin*	*Dover*
Arnold Maurice Baer	*English*	*Dover*
Robert Alden Bailey	*Pol. Sci.*	*Enfield Centre*
Ralph Gordon Barnes	*Philosophy*	*Chichester*
Mary Weeks Bateman	*English*	*North Stratford*
Harmon Simson Belinsky	*History*	*Rochester*
Bessie Borwick	*French*	*Portsmouth*
Ronald Forbes Buchan	*English*	*Concord*
Paul William Burns	*Pol. Sci.*	*Manchester*
Thomas Russell Burns, Jr.	*Pol. Sci.*	*Manchester*
Anthony Theodore Campbell	*Pol. Sci.*	*West Tisbury, Mass.*
Charles Frederick Cannell	*Psychology*	*Lebanon*
*Esther Fisher Carnegie	*Latin*	*Rochester*
Charlotte Elizabeth Codaire	*English*	*Manchester*
William Vincent Corcoran	*Pol. Sci.*	*Manchester*
Marion Smith Cotton	*English*	*Warren*
Mary Dodge	*French*	*Durham*
Vincena Mary Drago	*French*	*Milford*
Walter Arthur Emery	*English*	*Manchester*
Doris Mary Fowler	*English*	*Dover*
Robert Alfred Goodman	*History*	*Lebanon*
*Delmar Winkley Goodwin	*History*	*Concord*
Edwin Dvon Gritz	*English*	*Durham*
Walter Ludwig Gustafson	*Pol. Sci.*	*Portsmouth*
Robert Harris Hatch	*English*	*Dover*
*Charlotte Josephine Hills	*German*	*Mill Hall, Pa.*
Edwin Knight Hodgdon	*History*	*Epping*
Frank Fisher Hough	*Psychology*	*Lebanon*
Morey Greenwood Howe	*History*	*Manchester*
Eleanor Louise Huddleston	*French*	*Durham*
Milton Grant Johnson	*Pol. Sci.*	*Durham*
*Haruko Kawasaki	*English*	*Portsmouth*
Richard Harold Keefe	*Pol. Sci.*	*Dover*

Name	Course	P.O. Address
Lawrence Wendell Knight, Jr.	*Psychology*	*Concord*
Max Kostick	*Music*	*Farmington*
Robert Roger Lambert	*French*	*Manchester*
Ronaldo Aristide Landry	*French*	*Laconia*
Samuel James Levis, Jr.	*Pre-Law*	*Westville*
James Athanasius MacDonald	*English*	*Intervale*
William Joseph MacDonald	*Psychology*	*Intervale*
Ronald James McGivney	*Pol. Sci.*	*Berlin*
Donald Wallace MacIsaac	*English*	*Concord*
Leon Ernest Magoon	*Philosophy*	*Littleton*
Genevieve Armen Mangurian	*History*	*Manchester*
Catharine Margaretta Mason	*English*	*Newmarket*
Charles Harrington Melnick	*English*	*Laconia*
Janette Deborah Milliken	*Music*	*Freedom*
Howard Eugene Ordway	*Pol. Sci.*	*Berlin*
Elinor Storey Osgood	*French*	*Newburyport, Mass.*
Martha Phyllis Osgood	*English*	*Pittsfield*
Robertson Page	*English*	*Concord*
Elaine Catherine Peart	*History*	*Derry*
Hilda Patricia Peart	*Spanish*	*Derry*
Mary Emerson Perkins	*Pol. Sci.*	*Rye Beach*
Bertha Lucinda Piper	*History*	*Amherst*
*Margaret Pratt	*History*	*Antrim*
Richard Dean Prescott	*Pre-Law*	*Kensington*
Rosalind Ellen Putney	*History*	*Hopkinton*
Helen Winifred Rafferty	*History*	*Manchester*
Edith Madeline Raymond	*English*	*Laconia*
Edward Virginuis Rinalducci	*Pol. Sci.*	*Portsmouth*
Arthur Weston Robinson, Jr.	*History*	*Durham*
Spencer Shannon Rollins	*History*	*Laconia*
Marian Evelyn Rowe	*History*	*Exeter*
**Ralph Corlies Rudd	*Philosophy*	*Durham*
John Frank Sanders	*Psychology*	*Lakeport*
Ruth Louise Seidel	*English*	*North Salem*
Lena Shuman	*Latin*	*Dover*
Katherine Spellman	*French*	*Concord*
Gertrude Whittier Stickle	*English*	*E. Cleveland, Ohio*

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Name	Course	P.O. Address
Alice Monica Thompson	*Latin*	*Whitefield*
Madelyn Frances Tobin	*French*	*Manchester*
Brendan Emmett Toolin	*Pol. Sci.*	*Durham*
Elizabeth Antoinette Villanova	*Spanish*	*Rochester*
Elizabeth Ellen Wall	*English*	*Nashua*
Elizabeth Flora Williams	*English*	*Danbury*

PROFESSIONAL DEGREE IN ENGINEERING

Clayton William Holmes
(B.S., Univ. of N. H., 1926), *M.E.* *Haverford, Pa.*

TWO-YEAR CERTIFICATES

College of Agriculture (8)

Raymond Freemont Batchelder	*Wilton*
Charles Hugh Brady	*Newmarket*
Douglas Robert Brown	*Littleton*
Earle Drake Clark	*Northwood*
Douglas Newcomb Grant	*Buckland, Conn.*
J. Shumway Marshall	*Colebrook*
Richard Edwin Moulton	*Moultonboro*
John Robertson Wentworth	*Exeter*

NOTE—
** Indicates "With High Honor" (average of 90 or above for college course).
* Indicates "With Honor" (average of 85 to 90 for college course).

PRIZES AWARDED, 1936

Bailey Prize—Fred Willis Hoyt, 3rd. ..... The Weirs

Bartlett Prize—Jeremy Morrison ..... Portsmouth

Katherine DeMeritt Memorial Prize—Millicent Ethel Sleeper, Sunapee

Diettrich Memorial Cup—Constance Sceva Chandler .. Barnstead

Erskine Mason Memorial Prize—Allen Winthrop Low .. Durham

Hood All-Round Achievement Prize—Charles Sumner Joslin, Durham

Hood Dairy Cattle Judging Prizes:

First—Leonard Walter Gray ..... Colebrook
Second—Lester Charles Stevens ..... Walpole
Third—Walter Baldwin Knight, Jr. ..... Dover

American Legion Award—Lawrence Wendell Knight, Jr., Concord

Mask and Dagger Achievement Prizes:

First—Henry Edson Roberts ..... South Royalton, Vt.
Second—Warren Elmer Marshall ..... Manchester
Third—Marian Evelyn Rowe ..... Exeter

Phi Mu Medal—Eleanora Doris Boston ..... Dover

Phi Sigma Prize—Philip Lincoln Wright ..... Nashua

Class of 1899 Prize—Henry Edson Roberts ... South Royalton, Vt.

Edward T. Fairchild Prize:

First—Donald Wallace MacIsaac ..... Concord

Second—Doris Mary Fowler ..... Dover

Psi Lambda Cup—Jessie Mildred Bunker ..... Kingston

Alpha Chi Omega Prize—Alexander Karanikas ..... Goffstown

Alpha Xi Delta Cup—Evelyn Frances Craton ..... Hillsboro

Association of Women Students' Award—
JANICE MAE PEARSONS ..... Hill
CHRISTINE VIVIAN RASSIAS ..... Manchester

Alpha Zeta Scholarship Cup—ROBERT JENNESS ..... Dover

Locke Prize—CONSTANCE SCEVA CHANDLER ..... Barnstead

Alpha Chi Sigma Chemistry Award—ALLEN SANBORN HUSSEY, Lancaster

Phi Lambda Phi Award—JOHN THOMAS MADDOCK, Bradford, Mass.

Notable books awarded by the French Government to students who have distinguished themselves in the study of French this year:
ESTHER FISCHER CARNEGIE ..... Rochester
LENA SHUMAN ..... Dover
RACHEL CARMEN CARON ..... Nashua
CONSTANCE SCEVA CHANDLER ..... Barnstead

American Association of University Women Award:
ELEANOR KATHLEEN ARKELL ..... Dover

Osgood Plaque—PHI DELTA UPSILON FRATERNITY FOR 1936-37

Intercollegiate Writing Contest:
(Institutions competing, Universities of Maine, New Hampshire and Vermont)

Short Stories:
First Prize—EILEEN RITA MCLAUGHLIN ..... Laconia
Second Prize—(Triple Tie) GRACE MILDRED STEARNS, Manchester

Poetry:
First Prize—(Triple Tie) MARGARET PAIGE ..... North Weare
ALEXANDER KARANIKAS .. Goffstown

Harper's Magazine Essay Contest:
Third Prize—($25.00) ARTHUR KENNETH DAY ..... Laconia

Atlantic Monthly Essay Contest:
Fourth Prize—OLIVE LOUISE BROCK ..... Haverhill, Mass.
Fifth Prize—JOSEPH LEROY LOVELY ..... Exeter

Davis Cattle Judging Prizes for Two-year Students:
First Prize—EARLE DRAKE CLARK ..... Northwood
Second Prize—RICHARD EDWIN MOULTON .... Moultonborough
Third Prize—SPIROS ARTHUR BALATSOS ..... Reed's Ferry

STUDENTS, 1936 - 1937

Abbreviations Designating Courses

Agr. Ch.—Agricultural Chemistry
Arch.—Architecture
A. G.—Arts General
Agr.—General Agriculture
Agr. Tr.—Agriculture, Teacher Training
A. H.—Animal Husbandry
C. E.—Civil Engineering
Chem.—Chemistry
D. H.—Dairy Husbandry
Educ.—Professional Education
E. E.—Electrical Engineering
Engr.—Engineering
For.—Forestry
Gen. Bus.—General Business
H. E. Ex.—Home Economics, Extension Training
H. E. I.—Home Economics, Institutional
H. E. Tr.—Home Economics, Teacher Training
Hort.—Horticulture
M. E.—Mechanical Engineering
P. H.—Poultry Husbandry
Pre-Med.—Pre-Medical
Sec.—Secretarial
Soc. Ser.—Social Service
Soc. St.—Social Studies

UNIVERSITY OF NEW HAMPSHIRE

GRADUATE STUDENTS

(Men, 30; Women, 19; Total, 49)

Name	Course	P.O. Address
Alpers, Bernard Jacob B.A., New Hampshire, 1932	*Major History*	*Salem, Mass.*
Arkell, Eleanor Kathleen B.A., New Hampshire, 1936	*Major Education*	*Dover*
Barnes, Ralph Gordon B.A., New Hampshire, 1936	*Major Social Studies*	*Northwood Ridge*
Barry, Mary Catherine A.B., Regis College, 1936	*Major English*	*Dover*
Basim, Mary B.S., New Hampshire, 1934	*Major Social Studies*	*Portsmouth*
Beckwith, Marion Chipman A.B., Oberlin College, 1935	*Major Education*	*South Sudbury, Mass.*
Bowles, Mariette Roe A.B.,Middlebury College,1935	*Major English*	*Franconia*
Carnegie, Esther Fisher B.A., New Hampshire, 1936	*Major English*	*Rochester*
Chynoweth, Anne Janes B.A., Ohio Wesleyan, 1925	*Major Education*	*St. Albans, Vt.*
Clapp, James Wellington B.S.,Massachusetts State,1936	*Major Chemistry*	*Springfield, Mass.*
Clarke, William Herbert Ph.C., Palmer School, 1924 D.C., Keene, 1934	*Major Zoölogy*	*Sanford, Me.*
Cournoyer, Madeleine A.B., Brown, 1935	*Major French*	*Suncook*
Couture, Philip Gignac B.S., New Hampshire, 1936	*Major Entomology*	*Laconia*
Cowden, Herbert Bayley B.S., New Hampshire, 1936	*Major Chemistry*	*Durham*
Danforth, Harry Raymond B.A., New Hampshire, 1928	*Major Education*	*Concord*
Evans, Nell Wysor B.S., Boston University, 1935	*Major Education*	*Christiansburg, Va.*

GRADUATE STUDENTS

Name	Course	P.O. Address
Erickson, Edward Irvin B.S., Bates, 1928	*Major Education*	*Alton*
Foss, Helen Elizabeth A.B., Bates, 1927	*Major History*	*Rochester*
French, Kendrick Stephen B.S., New Hampshire, 1935	*Major Chemistry*	*Center Barnstead*
Gillette, Willard Raymor B.S.,Massachusetts State,1936	*Major Botany*	*North Billerica, Mass.*
Graves, John Kimball B.A., Washington, 1936	*Major History*	*Concord*
Gregg, Donald Crowther B.S., Vermont, 1935	*Major Chemistry*	*Westminster West,Vt.*
Hammett, Walton Henry B.A., Yale, 1932	*Major Sociology*	*Durham*
Kyer, Donald Louvell B.A., Maine, 1935	*Major Zoölogy*	*Brewer, Me.*
Ladd, Bradley Baybutt A.B., Dartmouth, 1929	*Major Education*	*Epping*
Ladd, Dolly Longfellow B.S., Simmons, 1919	*Major History*	*Epping*
Landry, Ronaldo Aristide B.A., New Hampshire, 1936	*Major French*	*Laconia*
Locke, William Judson B.S., New Hampshire, 1936	*Major Civil Engineering*	*Kittery, Me.*
McLeod, Dorothy Evelyn B.A., New Hampshire, 1935	*Major Education*	*Durham*
McLeod, Helen Patricia B.S., Saskatchewan, 1928	*Major Bacteriology*	*Durham*
McPhee, Gladys Emerson B.S., Simmons, 1916	*Major Education*	*Andover*
Miller, Wilbur Hobart B.S., New Hampshire, 1936	*Major Chemistry*	*Raymond*
Naghski, Joseph B.S., Cornell, 1936	*Major Bacteriology*	*New Lisbon, N. Y.*
O'Leary, Maurice John B.A., New Hampshire, 1928	*Major Social Studies*	*Rochester*

Name	Course	P.O. Address
Palmer, John Henry B.S., New Hampshire, 1936	*Major History*	*Rochester*
Peckham, Warren Francis B.S., New Hampshire, 1933	*Major Chemistry*	*Concord*
Petzold, Milton Herbert Ph.B., Syracuse, 1911	*Major Social Studies*	*Portsmouth*
Rafferty, Terrence John B.A., New Hampshire, 1934	*Major French*	*Portsmouth*
Rowell, Barbara B.A., New Hampshire, 1933	*Major English*	*Bristol*
Shields, Dorothy A.B., Bates, 1936	*Major French*	*Rochester*
Shuman, C. Kenneth B.S., Ohio State, 1935	*Major Agricultural Chemistry*	*Fletcher, Ohio*
Shuman, Lena B.A., New Hampshire, 1936	*Major French*	*Dover*
Slayton, Foster Herbert B.S., New Hampshire, 1928	*Major Social Studies*	*Barre, Vt.*
Smith, Caroline Eleanor B.S., New Hampshire, 1936	*Major Education*	*Durham*
Stacy, Jessie Eloise B.S., Boston University, 1934	*Major Education*	*Portsmouth*
Starratt, Howard Manuel Th.B., Gordon College, 1930	*Major Social Studies*	*Sanford, Me.*
Stone, Samuel Arthur B.S., New Hampshire, 1936	*Major Mathematics*	*Claremont*
VanDyke, John Howard A.B., Colgate, 1935	*Major Zoölogy*	*Rochester*
Washburn, Howard Reynolds A.B., Trinity, 1925	*Major Social Studies*	*West Lebanon, Me.*

SENIORS

(Men, 212; Women, 99; Total, 311)

Name	Course	P.O. Address
Adams, Virginia Lathrop	*A. G.*	*Swanzey*
Alliapoulos, Cosmas A.	*For.*	*Manchester*
Allen, Jessica Duckworth	*A. G.*	*Springfield, Mass.*
Annett, Donald Archie	*A. G.*	*Rollinsford*
Anton, William Perley	*A. G.*	*Concord*
Arnfield, John Moody	*Gen. Bus.*	*Hampton Beach*
Atkins, Ruth Irene	*Educ.*	*Orford*
Babcock, Nancy Elizabeth	*A. G.*	*Durham*
Baldwin, Dorothy	*A. G.*	*Wilton*
Barker, Edmund Lee	*C. E.*	*East Rindge*
Bartlett, Edmund Willis	*For.*	*Salisbury, Mass.*
Barton, Genella Elizabeth	*H. E.*	*Pittsfield*
Baxter, Thelma Leona	*A.G.*	*Dover*
Belanger, Jeannette Marie	*Pre-Med.*	*Manchester*
Belcher, Charles, Jr.	*Pre-Med.*	*East Andover*
Belson, Elliott Eli	*A. G.*	*Dover*
Benedick, Muriel Roberta	*A. G.*	*Manchester*
Bennett, Robert Towle	*A. G.*	*Northwood Ridge*
Bergquist, Donald Adolph	*Gen. Bus.*	*Manchester*
Bickford, Albert Greenlief	*Gen. Bus.*	*Rochester*
Bishop, Kenneth Paul	*A. G.*	*Peterborough*
Boulton, Frederic Henry	*C. E.*	*Goffstown*
Braconier, Harry Erland	*Pre-Med.*	*Brockton, Mass.*
Bragg, James Gerard	*Gen. Bus.*	*Gloucester, Mass.*
Brown, Frank Andrew	*For.*	*Hinsdale*
Brownell, Barbara	*H. E.*	*Dover*
Bumford, Forrest Henry	*M.E.*	*Dover*
Campbell, Marguerite Shirley	*A. G.*	*Nashua*
Carlisle, Marjorie Crane	*H. E.*	*Concord*
Caron, Rachel Carmel	*A. G.*	*Nashua*
Carr, Byron Williams	*A. G.*	*Contoocook*
Cassily, Marie Margaret	*A. G.*	*Dover*
Chandler, Constance Sceva	*A. G.*	*Barnstead*
Chase, Adele Bevelyn	*A.G.*	*Concord*
Chertok, Edwin Irving	*Gen. Bus.*	*Laconia*
Chodokoski, Edward Joseph	*C. E.*	*Berlin*

Name	Course	P.O. Address
Clark, Harold Jewett	*E. E.*	*Nashua*
Clement, Richard Walter	*M. E.*	*Nashua*
Collins, Leo Wendell	*Gen. Bus.*	*Millis, Mass.*
Colman, Dorothy Elizabeth	*A. G.*	*Rochester*
Comerford, Edward Volney	*Agr.*	*Bedford*
Conner, Alfred, Jr.	*Gen. Bus.*	*Newfields*
Cooperstein, Leon Isaac	*Gen. Bus.*	*Manchester*
Corson, Anne Elizabeth	*H. E.*	*Dover*
Craigin, Karl Francis	*For.*	*Dover*
Crawford, Raymond Douglas	*A. G.*	*New London*
Cricenti, Nicholas Joseph	*C. E.*	*New London*
Currier, Don Osvold	*A. G.*	*Manchester*
D'Allessandro, Elmo Augustus	*A.G.*	*Somersworth*
Dalrymple, Arthur Woodbury	*A. G.*	*Manchester*
Dancause, Lucien Alfred	*A. G.*	*Greenville*
Dane, Eleanore	*A. G.*	*Nashua*
Dane, John Preston, Jr.	*Gen. Bus.*	*Salem, Mass.*
Davis, Charles Ellsworth	*M. E.*	*New London*
Davis, Robert Charles	*A. G.*	*Hollis*
Day, Arthur Kenneth	*A. G.*	*Laconia*
Dearborn, Doris Jeannette	*A. G.*	*Laconia*
Dickey, Barbara Ethel	*A. G.*	*Salem*
Dickie, Logan Roswell	*A. H.*	*New Boston*
Dodge, Ruth	*A. G.*	*Durham*
Doe, Amelia	*A. G.*	*Dover*
Doe, Anna Veronica	*A. G.*	*Dover*
Dondero, Mary Jacqueline	*A. G.*	*Portsmouth*
Downs, John Austin	*C. E.*	*New Brighton, N. Y.*
Drew, Prentiss James	*Gen. Bus.*	*Newton Highlds., Mass.*
Dussault, William Ernest	*For.*	*Franklin*
Eastman, William Henry	*C. E.*	*Springfield, Mass.*
Edson, Philip Henry	*A.G.*	*West Lebanon*
Emerson, Rosamond Drew	*A. G.*	*Newmarket*
Emery, Winston Eugene	*C. E.*	*Percy*
Enman, Arthur LeRoy	*A. G.*	*Fremont*

Name	Course	P.O. Address
Evans, George Newell	*Chem.*	*Rochester*
Evans, Winston Dockham	*A.G.*	*Manchester*
Facey, William Brown	*Gen. Bus.*	*Manchester*
Farmer, William Parker	*M. E.*	*Manchester*
Feinberg, Doris	*A. G.*	*Dover*
Fernald, Frank Wadleigh	*E. E.*	*Nottingham*
Finn, John Joseph, Jr.	*Gen. Bus.*	*Newfields*
Fish, Robert Benjamin	*Agr.*	*Peterborough*
Fisher, Barbara Hildreth	*A. G.*	*Antrim*
Flanders, Robert Algernon	*A.G.*	*North Haverhill*
Flanders, Walter Clark	*Gen. Bus.*	*Manchester*
Foster, Dorothy	*A. G.*	*Portsmouth*
Foster, Ruth	*A. G.*	*Concord*
Frazer, James Oscar	*M.E.*	*Monroe*
Frederick, Elizabeth Elena	*H. E.*	*Voorkeesville, N.Y.*
Freese, Elisabeth	*A. G.*	*Bristol*
Furnans, Ernest William, Jr.	*A.G.*	*New Bedford, Mass.*
Gale, Phyllis Marian	*A. G.*	*Tilton*
Galway, Richard Edward	*Gen. Bus.*	*Manchester*
Gardner, Alfred Emmons	***Pre-Med.***	*Plymouth*
Gates, Hesslar Howell	*M. E.*	*Charlestown*
Geddis, Howard Alson	*For.*	*East Hebron*
Geno, Mary Lucretia	*H.E. Tr.*	*Concord*
Gilson, Wallace Hale	*Agr.*	*Hanover*
Goertz, Mrs. Georgia Mitchell	*Pre.-Med.*	*Alton*
Goodwin, Curtis Leslie	*M. E.*	*Dover*
Gordon, Oscar LeRoy	*A. G.*	*Ashland*
Grad, Willard Stanley	*A. G.*	*Meredith*
Grasso, Salvatore	*C.E.*	*Milford*
Gray, Leonard Walter	*D.H.*	*Colebrook*
Griney, Mary Gertrude	*H. E.*	*Rochester*
Grover, William Sherman	*Arch.*	*Dover*
Grupe, Wayne Stafford	*A. G.*	*Winchester*
Guy, John Joseph	*Chem.*	*Lincoln*
Hale, Rachel Eula	*H. E.*	*East Rindge*
Halladay, Dorothy Elizabeth	*H.E.I.*	*Claremont*

Name	Course	P.O. Address
Hance, Mary Lou	*H. E.*	*East Orange, N. J.*
Handschumaker, Dora	*A.G.*	*Manchester*
Hankins, Dorothy Louise	*A.G.*	*Durham*
Hargraves, Robert Frederick	*C.E.*	*Concord*
Hayes, Edward Henry	*Educ.*	*Dover*
Hazen, Pauline Ellen	*H.E.*	*Bethlehem*
Hazzard, David Henry	*A.G.*	*Berlin*
Heard, Emily Thompson	*A.G.*	*Center Sandwich*
Heins, George Deitz	*Gen. Bus.*	*Willow Grove, Pa.*
Hemm, Carl Henry Otto	*Educ.*	*Colebrook*
Henson, Dayton Mace	*Hor. Tr.*	*Winchester*
Hermes, Isabelle Kretzer	*H.E.I.*	*Mystic, Conn.*
Hersey, Elizabeth Winthrop	*A. G.*	*Wolfeboro*
Hickey, Joseph William	*Chem.*	*East Rochester*
Hixon, Elizabeth Webster	*A. G.*	*Lynn, Mass.*
Hobbs, John Raymond	*For.*	*Somersworth*
Holt, Harmon George	*A. G.*	*Dover*
Hooper, Carol	*H. E.*	*Sanbornville*
Hopps, VanBuren Fredrick	*A. G.*	*Groveton*
Horton, George Stillman, Jr.	*M.E.*	*Plaistow*
Hoxie, Wilbar Marden	*C. E.*	*Plaistow*
Huntington, Everett Curtis	*A. G.*	*Gorham*
Hurd, William Bromley, Jr.	*A. G.*	*Raymond*
Huse, James Austin	*Chem.*	*Durham*
Hyrk, Alma Lydia	*A. G.*	*East Jaffrey*
Ingalls, Ruth Constance	*A. G.*	*Berlin*
Jacques, Leo Charles	*Pre-Med.*	*Somersworth*
Janvrin, Dorothy Leavitt	*A. G.*	*Seabrook*
Johnson, Edgar Norman	*Pre-Med.*	*Milford*
Johnson, Frederick Herbert	*Chem.*	*Dover*
Johnson, Philip Edward	*C. E.*	*Milan*
Johnson, Robert Edward	*A.G.*	*Portsmouth*
Johnson, Ruth Sherman	*A. G.*	*Plaistow*
Jordan, Barbara Colby	*H. E.*	*Plainfield*
Karazia, Charles Alfred	*Gen. Bus.*	*Pt. Washington, N. Y.*
Karkavelas, Paul George	*A. G.*	*Dover*
Kay, Ruth Elizabeth	*A. G.*	*Dover*

Name	Course	P.O. Address
Kelley, Ruth Bettina	*A. G.*	*New Hampton*
Kendall, Harry Alburn	*A. G.*	*West Thornton*
Kimball, Howard Ray	*Educ.*	*North Haverhill*
Kimball, Maurice Charles	*Educ.*	*Concord*
Knight, Walter Baldwin, Jr.	*D.H.*	*East Rochester*
Kramer, Howard Gray	*For.*	*Ossipee*
Laing, Merta Ann	*H. E.*	*Manchester*
Lampesis, Peter Theodore	*Pre-Med.*	*Dover*
Lang, Benjamin Roger	*Gen. Bus.*	*Onset, Mass.*
Laramie, Kenneth Norman	*Gen. Bus.*	*Canaan*
Lekesky, Benjamin Anthony	*C. E.*	*Worcester, Mass.*
Lennon, Mary Elizabeth Gillett	*A. G.*	*Dover*
Levine, Noah Moses	*Pre-Med.*	*Chelsea, Mass.*
Libby, Frances Marie	*Educ.*	*Portsmouth*
Lilly, Avalon Robert	*A. G.*	*Manchester*
Link, Howard Charles	*C. E.*	*Southington, Conn.*
Linscott, Jane Catherine	*A. G.*	*Exeter*
Littlefield, George Martin, Jr.	*Educ.*	*Hampstead*
Locke, Howard Revere, Jr.	*A. G.*	*Amherst*
Lockwood, Paul Francis	*A. G.*	*Dover*
Long, Avard Chipman	*For.*	*Hampton*
McCormack, Stewart Vernon	*Pre-Med.*	*Milford*
McDonough, Augustin Thomas	*Gen. Bus.*	*Manchester*
McEvoy, Weston Ernest	*A. G.*	*Henniker*
McLaughlin, Eileen Rita	*A. G.*	*Laconia*
McLean, Alexander Fiske	*Chem.*	*Larchmont, N. Y.*
Mack, John Halford	*Chem.*	*Claremont*
Mallis, Constantine	*A. G.*	*Berlin*
Manchester, Karl Robert	*Gen. Bus.*	*Providence, R. I.*
Manchester, Winslow	*A. G.*	*Manchester*
Mangold, John William	*E. E.*	*Watertown, Mass.*
Mannion, Richard Thomas	*A.G.*	*Concord*
Marcy, Gloria Brigden	*A. G.*	*Hillsboro*
Martin, Ida Mary	*A. G.*	*Hudson*
Mastin, Eleanor Josephine	*A. G.*	*New London*
Matison, Matthew Irving	*A.G.*	*Dover*
Matthews, Thomas Vernon	*Pre-Med.*	*Concord*

Name	Course	P.O. Address
Matthews, William Roland	*A. G.*	*Troy, N. Y.*
Mattice, Edson Russell	*Gen. Bus.*	*Penacook*
Mead, Mary Ella	*A. G.*	*Bartlett*
Meader, Elwyn Marshall	*Hort.*	*Rochester*
Meeker, George Henry	*Gen. Bus.*	*Durham*
Merrill, Harold Douglas	*C. E.*	*Concord*
Merrill, Herbert Thompson	*A. G.*	*Hanover*
Messer, Richard Edwin	*A. G.*	*New London*
Miller, Belle	*A. G.*	*Charlestown*
Mirey, Walter Leon, Jr.	*Educ.*	*Ashburnham, Mass.*
Mitchener, Allan Edward	*A. G.*	*Fremont*
Monroe, Norma	*A.G.*	*Taunton, Mass.*
Moore, Leonard Smith	*M. E.*	*Milford*
Morang, Ralph Waldo	*P.H.*	*Wiscasset, Me.*
Morrill, Laurence Blake	*For.*	*Concord*
Morris, Frank Albert	*E. E.*	*Newport*
Morrison, Jeremy	*A. G.*	*Derry*
Moscardini, Arthur Aldo	*M. E.*	*Tilton*
Mott, Ralph Ernest	*A. G.*	*Portsmouth*
Moulton, Lewis Harvey	*For.*	*Moultonboro*
Mountain, Harold Shirley	*For.*	*Berlin*
Mullen, Francis Edward	*Pre-Med.*	*Newmarket*
Munger, Helen Elizabeth	*A. G.*	*Franklin*
Munton, Alexander Vincent	*Chem.*	*Nashua*
Musgrove, Frank Richard	*Educ.*	*Hanover*
Nathanson, Joseph	*Educ.*	*Millis, Mass.*
Ninde, Daniel M.	*A.G.*	*Durham*
Norris, Kenneth Ricker	*Educ.*	*Melrose, Mass.*
Norton, William Alexander, Jr.	*Pre-Med.*	*Hopkinton*
Nye, George Prescott	*A. G.*	*Atkinson*
O'Brien, Frank Edwin	*Educ.*	*Concord*
O'Neil, Paul Thomas	*E. E.*	*Amesbury, Mass.*
Paquin, Jean Ernest	*Pre-Med.*	*Manchester*
Parsons, Carl Ellsworth, Jr.	*A. G.*	*Weymouth, Mass.*
Pearsons, Janice Mae	*Pre-Med.*	*Hill*
Pease, Chester Chapin, Jr.	*C. E.*	*Greenville*
Peavey, Estelle Gilman	*A.G.*	*Exeter*
Peters, Marion Elizabeth	*A.G.*	*North Bennington, Vt.*

Name	Course	P.O. Address
Petrie, William Charles	*A. G.*	*Woodsville*
Peyser, Charles Samuel	*Gen. Bus.*	*Portsmouth*
Pickett, Madlon F.	*A. G.*	*Newport*
Pickford, Walter John	*E. E.*	*Berlin*
Pierce, Donald Vittum	*For.*	*Tamworth*
Plumer, William Bowdoin	*A. G.*	*Bristol*
Plummer, Roger William, Jr.	*Agr. Tr.*	*Hopkinton*
Powers, Nancy	*H. E.*	*Durham*
Pratt, Richard Gile	*Arch.*	*Manchester*
Prince, Frances	*H. E.*	*New Boston*
Prince, Ruth	*H. E.*	*Andover*
Quinn, Margaret Ann	*A. G.*	*Manchester*
Rassias, Christine Vivian	***Soc. Ser.***	*Manchester*
Raymond, Olive Pauline	*H. E.*	*Limestone, Me.*
Redman, William Stewart	*A. G.*	*Manchester*
Remick, Roland Arthur	*Educ.*	*Bristol*
Richards, Olive Jeannette	*A. G.*	*Exeter*
Ring, Frances Elizabeth	*H. E.*	*Wilton*
Robbins, William Parks	*A.G.*	*Portsmouth*
Roberts, Olive Carolyn	*H. E.*	*So. Royalton, Vt.*
Roberts, Ormond Armstrong	*Agr.*	*Dover*
Roberts, Hall Scott	*A.G.*	*Dover*
Rogean, Arnold Hugh	*Hort.*	*Tilton*
Rogers, Zygmond Joseph	*Arch.*	*Amesbury, Mass.*
Rollins, Edmund John	*A.G.*	*Durham*
Romanovski, Genevieve Leokade	*A. G.*	*Hudson*
Rose, William Richard	*Educ.*	*Portsmouth*
Rosen, Bernard Davis	*Chem.*	*Portsmouth*
Rosi, Albert Joseph	*Pre-Med.*	*Colebrook*
Ross, Charles Elden	*D. H.*	*Berlin*
Ross, James Otis	*For.*	*E. Barrington*
Rozamus, Michael Joseph	*Gen. Bus.*	*Manchester*
Sanborn, Priscilla Louise	*A. G.*	*Manchester*
Sanborn, Winifred	*A. G.*	*Contoocook*
Sands, Barbara Winder	*A. G.*	*Newmarket*
Saunders, John Joseph	*Gen. Bus.*	*Somerville, Mass.*
Scannell, Leo Robert	*Educ.*	*Manchester*

Name	Course	P.O. Address
Seamans, Roger Albert	*For.*	*Newport*
Shanahan, Ann Dorothea	*A. G.*	*Somersworth*
Shaw, Wyman Brown	*Pre-Med.*	*Dover*
Shea, Denis Anthony	*Chem.*	*Manchester*
Simpson, Allan Haines	*M. E.*	*Lakeport*
Sleeper, Millicent Ethel	*A. G.*	*Sunapee*
Smart, Robert Allan	*For.*	*Portsmouth*
Smith, Clyde Reverdy	*C. E.*	*New London*
Smith, Howard Weedon	*A. G.*	*New Ipswich*
Smith, Raymond	*Pre-Med.*	*Derry*
Solomon, Philip	*Pre-Med.*	*Franklin*
Stevens, Clarence Edgar	*Agr. Tr.*	*Durham*
Stevens, Jean Woodrow	*H. E.*	*Derry*
Stevens, Lester Charles	*Agr.*	*Walpole*
Stevens, Robert Alwin	*D. H.*	*Raymond*
Stewart, Donald Waring	*Hort.*	*Nashua*
Stone, Josephine Bachelder	*H. E.*	*Claremont*
Sullivan, Robert Edward	*For.*	*Concord*
Swidzinski, Edmund	*C. E.*	*Quincy, Mass.*
Taylor, Roland Arthur	*Hort.*	*Bennington*
Teeri, Arthur Eino	*Pre-Med.*	*Durham*
Thayer, Martha Louise	*H. E.*	*Woodsville*
Theberge, Mary Ellen	*A.G.*	*Salmon Falls*
Tinker, Rebecca Irene	*H. E.*	*Nashua*
Tomkinson, Stanley Everett	*M. E.*	*Lebanon*
Towers, Richard Rutfred	*C. E.*	*Berlin*
Trickey, Gertrude May	*Educ.*	*Alton Bay*
Trubenbach, Alfred Chas. Eugene	*A. G.*	*Strafford*
Tufts, Lewis Everette	*Chem.*	*Manchester*
Twyon, Donald Edward	*Educ.*	*Claremont*
Varney, Fred Maurice, Jr.	*Gen. Bus.*	*Dover*
Verville, Homer Anthony	*A. G.*	*Concord*
Vier, Dwayne Trowbridge	*Chem.*	*Dover*
Wageman, Frank Antonio	*A.G.*	*Manchester*
Waldo, Stanley Chedel	*For.*	*Laconia*
Walker, Genevieve Raycraft	*M. E.*	*Tilton*
Wallace, Oliver Pagan	*A.G.*	*Claremont*

SENIORS

Name	Course	P.O. Address
Warren, Priscilla	*A. G.*	*Portsmouth*
Weatherby, Albert Martin, Jr.	*M. E.*	*Newburyport, Mass.*
Weaver, Edwina Merrie	*A. G.*	*Concord*
Webster, Peter Walker	*E. E.*	*Concord*
Weir, William Franklin	*A.G.*	*Durham*
Wentworth, Carleton McIntire	*Gen. Bus.*	*Nashua*
White, Ruth Mildred	*H. E.*	*Concord*
Wilbur, Herbert Eugene	*M. E.*	*Durham*
Wilcox, Louis Hersey	*For.*	*Center Ossipee*
Williams, Mary Kathleen	*H. E.*	*Manchester*
Winn, Alden Lewis	*E. E.*	*Portsmouth*
Witter, Vincent Michael	*Educ.*	*Berlin*
Woodbury, Jane Wealthy	*A. G.*	*Salem Center*
Woodward, Lillian Faye	*H. E.*	*Deerfield*
Wootton, Margaret Bell	*A. G.*	*Wolfeboro*
Wright, Edward Nelson	*E. E.*	*Portsmouth*
Wyman, Edgar Pitkin	*For.*	*Somerville, Mass.*
Zais, Melvin	*A. G.*	*Fall River, Mass.*
Zane, Edna Elizabeth-Ann	*A. G.*	*Exeter*

JUNIORS

(Men, 197; Women, 79; Total, 276)

Name	Course	P.O. Address
Abramson, Samuel Gordon	*A. G.*	*Berlin*
Ahearne, William Joseph	*A. G.*	*Union*
Ahern, Robert Patrick	*D. H.*	*Charlestown*
Ahlgren, Lennart Conrad	*A.G.*	*Manchester*
Aldrich, Martha Helen	*H. E.*	*Lisbon*
Anderson, William Ayrton	*C. E.*	*Sunapee*
Armstrong, Florence Catherine	*A. G.*	*Penacook*
Atherton, Sumner Edward	*Gen. Bus.*	*West Lebanon*
Baker, Ruth Helen	*A. G.*	*East Kingston*
Balloch, James Pardon	*M. E.*	*Manchester*
Barnes, Gertrude	*A. G.*	*Billerica, Mass.*

JUNIORS

Name	Course	P.O. Address
Battin, Richard, 3rd	*A.G.*	*Whitestone, N. Y.*
Bazzocchi, Anthony	*Gen.Bus.*	*Portsmouth*
Bennett, Adellman Sylvester	*Gen. Bus.*	*Gilmanton Iron Works*
Bennett, Wendell Farrar	*Pre-Med.*	*Kingston*
Bergeron, Norbert Lawrence	*Pre-Med.*	*Rochester*
Berry, Joseph Ford	*For.*	*Wayne, Me.*
Bialon, Mildred Antonia	*A. G.*	*Manchester*
Boerker, Huldah Irene	*A. G.*	*Kingston, N. Y.*
Boggis, Virginia May	*A. G.*	*Concord*
Bond, Richard Guy	*C. E.*	*Bartlett*
Boucher, Arnold Eugene	*E. E.*	*Nashua*
Breck, Warren Grover	*Chem.*	*Wentworth*
Breck, Olive Louise	*Educ.*	*Haverhill, Mass.*
Brosius, Irene Emily	*Educ.*	*Berlin*
Brown, Ellen Elizabeth	*Educ.*	*Center Strafford*
Browning, Robert Weston	*Gen. Bus.*	*Manchester*
Bullard, Charles Winston	*A.G.*	*Arlington, Mass.*
Bullock, Comfort	*H. E.*	*Concord*
Burnett, John Robert	*Educ.*	*Concord*
Burt, Victoria Tura	*A. G.*	*Brookline, Mass.*
Butterworth, William Fox	*Gen. Bus.*	*Durham*
Cain, Theresa Elizabeth	*A.G.*	*Milford*
Caldwell, Winston Flanders	*M. E.*	*Dover*
Carrico, Edward Channing	*Gen. Bus.*	*Pt. Washington, N. Y.*
Carroll, Kathryn Rita	*A. G.*	*Nashua*
Carter, Raymond Howard	*M.E.*	*Lebanon*
Caswell, Gordon Alpheus	*Gen. Bus.*	*Berwick, Me.*
Chandler, Alfred George	*Pre-Med.*	*Candia*
Chellis, Ruth Watkins	*A. G.*	*Meriden*
Cheney, John	*Chem.*	*Manchester*
Clark, Richard Frederick	*E. E.*	*Nashua*
Clement, Robert Otis	*A. G.*	*Nashua*
Cling, Mordecai	*A.G.*	*Concord*
Clow, Evelyn May	*H.E.I.*	*Greenville*
Coffey, Louise Irene	*A.G.*	*Townsend, Mass.*
Coney, Richard James	*A.G.*	*Bethlehem*

JUNIORS

Name	Course	P.O. Address
Colokathis, Paul Peter	*Pre-Med.*	*Dover*
Congdon, Myrtle Irene	*A. G.*	*Lancaster*
Conrad, James Dignum	*For.*	*Saugus, Mass.*
Cooper, Esther Blanche	*H. E.*	*Lincoln*
Cotton, Charles Allen	*For.*	*Conway*
Crosby, Florence Grace	*A. G.*	*Enfield*
Cudhea, Lois Eleanor	*H. E.*	*Nashua*
Cullis, Robert Edward	*Gen. Bus.*	*Epping*
Damon, John Kennan	*Gen. Bus.*	*W. Concord, Mass.*
Davis, Paul Frederick	*Educ.*	*Tilton*
Dean, Clara Harriette	*H. E.*	*Grafton*
DeSchuiteneer, Humphrey Edward	*A.G.*	*Manchester*
Donle, Walter Kincaid	*C. E.*	*Newport*
Donnelly, Royston Walworth	*Gen. Bus.*	*St. Albans, N. Y.*
Dooley, Walter Newman	*A.G.*	*Hudson*
Dubiel, Joseph Michael	*Chem.*	*Manchester*
DuBois, Robert Arthur	*M. E.*	*Manchester*
DuRie, John David	*A. G.*	*Rahway, N. J.*
Dyke, John Rand	*Pre-Med.*	*Atkinson*
Eames, Carl Ernest	*For.*	*Errol*
Edgerly, Barbara Eileen	*A. G.*	*Lincoln*
Evans, Nelson Foss	*Chem.*	*Rochester*
Farr, Richard	*Gen. Bus.*	*Lebanon*
Fellows, Robert Stillman	*Gen. Bus.*	*Manchester*
Fernald, Christine Frances	*A. G.*	*Nottingham*
Ferrin, Harold William	*A. G.*	*Manchester*
Flanders, June	*Soc. Ser.*	*Concord*
Flanzbaum, Lester	*A.G.*	*Winthrop, Mass.*
Freedman, Jacob	*A. G.*	*Manchester*
Furman, Albert	*A.G.*	*Manchester*
Giarla, Thomas Charles	*M. E.*	*Concord*
Gilman, Marshall Guy	*Pre-Med.*	*Franklin*
Gisburne, John Robert	*A. G.*	*E. Milton, Mass.*
Glynn, Robert Sydney	*Pre-Med.*	*Belleville, N. J.*
Godbois, Henry Joseph	*A. G.*	*Dover*
Gonichon, James Jules	*Agr.*	*Alton*
Goodwin, John Floyd	*C. E.*	*Piermont*

Name	Course	P.O. Address
Goodwin, William Henry, Jr.	*C. E.*	*Andover*
Goud, Prescott Lee	*E. E.*	*Holderness*
Gozonsky, Abraham	*A. G.*	*Laconia*
Grady, John Christopher	*Educ.*	*Dover*
Greenough, Ruth Louise	*A. G.*	*Hooksett*
Griffin, Dorothy Adele	*A.G.*	*Fremont*
Griffiths, Leslie Osborn	*A. G.*	*Berwick, Me.*
Gruber, Richard Dexter	*Pre-Med.*	*Brighton, Mass.*
Gurley, Robert Clarence	*A. G.*	*Concord*
Ham, Frances Marion	*Pre-Med.*	*Durham*
Hanson, Arthur Francis	*Agr. Tr.*	*East Kingston*
Harden, Henry Clay, Jr.	*Chem.*	*Somersworth*
Harkaway, Aaron Abraham	*A. G.*	*Nashua*
Harmon, Donald Ward	*Arch.*	*Durham*
Harriman, Byron Lynn	*A. G.*	*Warner*
Hart, Robert Thompson	*Chem.*	*Bristol, Conn.*
Hatch, Louise Estelle	*H. E.*	*Smithtown*
Hayes, Gertrude Agnes	*A. G.*	*Dover*
Heald, Burton Keith	*C. E.*	*Nashua*
Heath, Calvin Aldrich	*A. G.*	*North Woodstock*
Henderson, Gordon Kenneth	*M. E.*	*Dover*
Herlihy, Thomas Joseph	*M. E.*	*Wilton*
Hersey, William Wendell	*A. G.*	*Portsmouth*
Hewitt, Madeleine Gertrude	*A. G.*	*Portsmouth*
Higgins, Norman Clement	*For.*	*Exeter*
Hill, Francis Bremner	*Gen. Bus.*	*Deerfield*
Hillier, Donald Thomas	*A. G.*	*Lancaster*
Holmes, George Allen	*Agr. Tr.*	*Charlestown*
Howard, Eleanor Frances	*A. G.*	*Dover*
Howard, Gertrude Louise	*A. G.*	*Derry*
Hudson, Lois Clark	*A. G.*	*Laconia*
Huse, Raymond Addison	*E. E.*	*Meriden*
Ingham, George Law	*M. E.*	*Nashua*
Janetos, Nicholas Simon	*Pre-Med.*	*Dover*
Jenness, Robert	*D. H.*	*Dover*
Jewett, Ruth Hamlin	*A.G.*	*Gorham*
Johnson, Christine Luella	*A.G.*	*Alstead*

JUNIORS

Name	Course	P.O. Address
Johnson, Doris Mae	*A. G.*	*Concord*
Johnson, Fred Hoyer	*M. E.*	*Port Richmond, N. Y.*
Jones, Robert Hayward	*Arch.*	*Hanover*
Jordan, Dorothy Anna	*A. G.*	*Concord*
Kay, William Jamieson	*C. E.*	*Claremont*
Kazienko, Louis Walter	*Educ.*	*Manchester*
Kazmirchuk, Annie	*H. E.*	*Lincoln*
Kelleher, James Howard	*Pre-Med.*	*Durham*
Kelly, Donald Hoyt	*Chem.*	*Newton*
Kemp, Robert Ingalls	*E. E.*	*Walpole, Mass.*
Kershaw, Robert Morse, 3rd	*For.*	*So. Portland, Me.*
Kidder, Robert Wilson	*A. G.*	*Laconia*
Kierstead, James Clair	*Chem.*	*Lebanon*
Kizala, Bolik	*Agr. Tr.*	*Nashua*
Knight, Vesta	*A.G.*	*Concord*
LaFlamme, Charles Robert	*Pre-Med.*	*Manchester*
Lane, Harold LeGro	*For.*	*Conway*
Langley, Bernard Howard	*C. E.*	*Gilmanton*
LaPlante, Robert Athol	*Gen. Bus.*	*Concord*
Larkin, Harriet	*A. G.*	*Hillsboro*
Laskarzewski, Boleslaus Frank	*D. H.*	*Meriden, Conn.*
Lederman, Eli	*Pre-Med.*	*Brockton, Mass.*
Lenzi, Gordon Frank	*M. E.*	*Rochester*
Leocha, Adolph John	*Educ.*	*Claremont*
Lincoln, Edward Hinkley	*A. G.*	*Meriden*
Little, Edward William Herbert	*Pre-Med.*	*East Derry*
Littlefield, Harry Young	*E. E.*	*Amesbury, Mass.*
Lubchansky, Adelaide	*A.G.*	*New London, Conn.*
Lyons, Regis Angela	*A. G.*	*Manchester*
McComb, Raymond Morris	*Pre-Med.*	*East Kingston*
McCormack, Hazel Isabelle	*A. G.*	*Milford*
McKean, Glen Wilson	*A.G.*	*Haverhill*
McKeigue, John Edward	*Pre-Med.*	*Haverhill, Mass.*
McKone, Jean Elisabeth	*A. G.*	*Dover*
McLaughlin, Frederick Arthur	*Gen. Bus.*	*Dover*
McMahon, James Davis	*C. E.*	*Franklin*
McNamara, Elizabeth Mary	*Soc. Ser.*	*Manchester*

Name	Course	P.O. Address
McNamara, Frederick Thomas	*Gen. Bus.*	*West Lebanon*
MacQueen, George	*E.E.*	*Penacook*
Macnaughton, Constance Gertrude	*Gen. Bus.*	*Nashua*
Mann, Paul Israel	*A. G.*	*Greenland*
Marden, Viola Agnes	*A. G.*	*Dover*
Marshall, Sumner Eugene	*P. H.*	*Penacook*
Martel, Thelma Elizabeth	*A. G.*	*Durham*
Martin, Charles Burt	*E. E.*	*Danbury*
Martin, Russell Frederick	*A. G.*	*Gloucester, Mass.*
Martin, Wendell James	*A. G.*	*W. Stewartstown*
Mason, George Knight	*M. E.*	*Atkinson*
Matson, Ellen Maria	*H. E.*	*New Ipswich*
Maxson, Robert Orville	*C. E.*	*Canterbury*
Mendelson, Donald Jason	*A. G.*	*Nashua*
Montrone, Alfred Joseph	*Gen. Bus.*	*Keene*
Moran, Helen Ann	*A.G.*	*Nashua*
Morrill, Barbara Lillian	*A. G.*	*Dover*
Morrill, Harry Eugene	*Gen. Bus.*	*Winnepesaukee*
Morse, Clara Elizabeth	*A. G.*	*Gorham*
Morse, Norma Vivian	*A. G.*	*Keene*
Moulton, Verna Emma	*H. E.*	*E. Plainfield*
Murphy, James Erwin	*A. G.*	*Gorham*
Murphy, Peter Joseph	*Educ.*	*Dover*
Myllymaki, William Richard	*Chem.*	*West Concord*
Nellson, Robert Archibald	*A. G.*	*Waltham, Mass.*
Norris, Esther Kathleen	*A. G.*	*Woodsville*
Norton, Jane	*A.G.*	*Dover*
Noury, George Albert	*Gen. Bus.*	*Claremont*
O'Brien, John Joseph	*Gen. Bus.*	*Portsmouth*
O'Brien, Paul Joseph	*E. E.*	*Nashua*
Otis, Stanton Clarke	*C. E.*	*Concord*
Page, Lillian Josephine	*H. E.*	*New Ipswich*
Parker, Conrad Beedy	*For.*	*Manchester*
Parker, Mayland Linwood	*Chem.*	*Keene*
Pastor, Jackson	*Gen. Bus.*	*Nashua*
Patten, George Daniel	*C. E.*	*Franklin*

JUNIORS

Name	Course	P.O. Address
Pedrick, Dexter Kilborn	*A. G.*	*Meredith*
Perkins, Alice Mary	*H. E.*	*Kennebunkport, Me.*
Perkins, Priscilla	*A. G.*	*Concord*
Perkins, William Lincoln	*Pre-Med.*	*Gorham*
Peterson, Carl William	*Chem.*	*Belmont, Mass.*
Photos, Christine Theodora	*A. G.*	*Dover*
Pickett, Wiley Jason	*Chem.*	*Concord*
Pillsbury, Leonard Hobart	*A. G.*	*Derry*
Plaisted, Donald Ernest	*For.*	*Meredith*
Plummer, Charles Henry	*E. E.*	*Somersworth*
Pokigo, Boleslaw Henry	*C. E.*	*Manchester*
Potvin, Florina Marie	*A.G.*	*Claremont*
Pridham, Mary Jacquelyn	*Soc. Ser.*	*Portsmouth*
Priest, Homer Farnum, Jr.	*Chem.*	*Nelson*
Pryor, Charles Edward	*Arch.*	*Dover*
Putnam, Dexter Nevins	*D. H.*	*Wilton*
Quinn, George Eliot Birtwell	*Pre-Med.*	*Concord*
Rand, Robert Henry	*Gen. Bus.*	*Plymouth*
Rangazas, Eva Elpinicky	*Chem.*	*Nashua*
Raskin, **Melvin Newell**	*Pre-Med.*	*Mattapan, Mass.*
Reid, Dorothy Mae	*H.E.I.*	*Bethlehem*
Rhodes, Eleanor	*A. G.*	*Lancaster*
Rice, Carl Sherwood	*M. E.*	*Manchester*
Rich, Jane Frances	*Educ.*	*Lynn, Mass.*
Richardson, Charles Elwin	*E. E.*	*Lynn, Mass.*
Ricker, George Winthrop	*M. E.*	*Berwick, Me.*
Robinson, Ruth Helena	*Educ.*	*Dover*
Rodgers, Mabel Ellen	*H.E.I.*	*Temple*
Rolfe, Benjamin Curtis	*Arch.*	*Penacook*
Rosinski, Francis Joseph	*A. G.*	*Claremont*
Rossi, Oscar Louis	*E. E.*	*Waterbury, Conn.*
Rowe, Emma Pearl	*A. G.*	*Exeter*
Roy, Charles Blake	*Agr. Tr.*	*Barnet, Vt.*
Sargent, Neil Edward	*Pre-Med.*	*Plymouth*
Schiavoni, Frank James	*A. G.*	*Manchester*
Scott, Bernard Earle	*A. H.*	*Hollis*
Scripture, **Mabel Dawson**	*A.G.*	*Portsmouth*

Name	Course	P.O. Address
Scudder, James Henry	*For.*	*Durham*
Shapiro, Lester	*Gen. Bus.*	*Manchester*
Shea, John Richard	*Gen. Bus.*	*Manchester*
Shepherd, Francis Harold	*Gen. Bus.*	*Tilton*
Sherburne, Mary Ellen	*A. G.*	*Newmarket*
Sikalias, John	*D. H.*	*Dover*
Simonds, Lester Elliott	*A. G.*	*Manchester*
Skoglund, Winthrop Charles	*P. H.*	*Lynn, Mass.*
Smith, Harold Louis	*Chem.*	*Chester*
Smith, Richard Carlton	*M. E.*	*Strafford*
Smith, Ruth Lillian	*H. E.*	*East Barrington*
Smith, William Lloyd	*Pre-Med.*	*Amherst*
Snow, Joseph Ingram	*A. G.*	*Saugus, Mass.*
Snowman, Arthur Vanstane	*Chem.*	*Lebanon*
Somero, Andrew Leander	*Agr.*	*New Ipswich*
Spaulding, William Rowe, Jr.	*A. G.*	*Wollaston, Mass.*
Stenzel, George	*For.*	*Durham*
Stevens, Alan	*C. E.*	*Medfield, Mass.*
Stone, Wilbur Arthur	*Chem.*	*Salem, Mass.*
Strickland, Wallace Albert	*C. E.*	*Lincoln*
Swansey, Robert Mitchell	*A. G.*	*Exeter*
Tanney, Stanley Benjamin	*Agr. Tr.*	*Antrim*
Terris, George Everett	*Gen. Bus.*	*Nashua*
Thompson, Lucille Marie	*H. E.*	*Lee*
Thompson, William James	*Educ.*	*Manchester*
Thyng, Charles Herbert	*C. E.*	*Barnstead*
Tilton, Marjorie Augusta	*A. G.*	*Woodsville*
Tolles, Robert Walter	*E. E.*	*Terryville, Conn.*
Trabucco, Alfred	*Pre-Med.*	*New Hampton*
Tremblay, Roland Gilbert	*Pre-Med.*	*Somersworth*
True, Lucile Agnes	*A. G.*	*Fremont*
Turci, John Delmo	*C. E.*	*Portsmouth*
Tyson, Victor Eyre, Jr.	*Chem.*	*Manchester*
Vannah, Betsey	*Gen. Bus.*	*Berlin*
Verville, Martin James	*A. G.*	*Concord*
Waters, Warren Edwin	*A. G.*	*Pittsfield*
Wentworth, Elizabeth Hall	*A. G.*	*Somersworth*

SOPHOMORES

Name	Course	P.O. Address
Wentzell, Homer Philbrick	*A. G.*	*Rye*
West, Dorothy Marion	*A.G.*	*Lebanon*
Whitcher, Lawrence George	*M.E.*	*Berlin*
Whitcomb, Percy Robert	*A.G.*	*Littleton*
Whyte, Richard Van	*A. G.*	*Portland, Me.*
Willard, Howard Stanley	*For.*	*Passumpsic, Vt.*
Wood, Frederick MacDonald	*A.G.*	*Derry*
Zautra, Joseph Anthony	*A. G.*	*Nashua*

SOPHOMORES

(Men, 294; Women, 137; Total, 431)

Name	Course	P.O. Address
Abbott, George Curwin	*C. E.*	*Pelham*
Adams, Elizabeth Mary	*A. G.*	*Tilton*
Adams, Everett Mead	*E. E.*	*Exeter*
Ahearn, Catherine Christine	*A. G.*	*Keene*
Alexander, Hope Alice	*A. G.*	*Portsmouth*
Allen, George Earl	*Gen. Bus.*	*Dover*
Andrews, Donald Augustus	*A. G.*	*Bethlehem*
Andrews, Elmer Vincent	*A. G.*	*Warren*
Andruchuk, Mary	*A. G.*	*Dover*
Arnold, Lloyd Carlton, Jr.	*M.E.*	*Manchester*
Atwood, Harry Hibbard, Jr.	*Agr. Ch.*	*Manchester*
Baker, Ira Webster, Jr.	*A. G.*	*Franklin*
Baker, Sidney R.	*Pre-Med.*	*South Tamworth*
Balatsos, Spiros Arthur	*Agr.*	*New York City*
Ballou, Wallace	*A.G.*	*Rochester*
Barker, Miriam	*Pre-Med.*	*Reed's Ferry*
Barrett, Esther Smead	*A. G.*	*Littleton*
Bartlett, Edson Orlando	*Gen. Bus.*	*Bridgewater*
Bartlett, Kenneth Roby	*A.G.*	*Concord*
Batchelder, Hilda	*H. E.*	*Concord*
Batchelder, James Henry, 3rd	*Chem.*	*North Woodstock*
Batley, John William	*E. E.*	*Dover*
Baum, Anna	*Soc. Ser.*	*Portsmouth*

Name	Course	P.O. Address
Baxter, Elizabeth Nowell	*A. G.*	*Dover*
Beary, Bernard John	*A.G.*	*Whitman, Mass.*
Beattie, James Richard	*For.*	*Durham*
Beckett, Dorothy Wilson	*H.E.*	*Bristol, Conn.*
Bell, Phillip Richmond	*Gen. Bus.*	*Concord*
Bennett, Andrew Williams	*Pre-Med.*	*Hingham, Mass.*
Bennett, Marian	*A.G.*	*Manchester*
Bergeron, Isidore Emilio	*Pre-Med.*	*Rochester*
Berkovich, Norman	*A.G.*	*Newmarket*
Berry, Barbara	*A. G.*	*Stratham*
Bertagna, Cæsar Joseph	*E.E.*	*Wilmot*
Bertolini, Guelfo	*C. E.*	*Barre, Vt.*
Besaw, Charles Kenneth	*Gen. Bus.*	*Lisbon*
Bishop, Arthur Douglas	*Gen. Bus.*	*Lisbon*
Bishop, Howard LeRoy	*A.G.*	*Brookline*
Bissell, Ralph Howard	*For.*	*Marlboro*
Blakey, Clarence William	*A.G.*	*Concord*
Blankenberg, Sylvia Constance	*H. E.*	*Portsmouth*
Bohanan, Ashton Jewell	*Agr.*	*Contoocook*
Boy, Pierre Donald	*For.*	*Berlin*
Boyd, Margaret Woodbury	*A. G.*	*Newton*
Bozek, Joseph Martin	*Gen. Bus.*	*Manchester*
Bradley, Robert Franke	*For.*	*West Haven, Conn.*
Bremner, Elizabeth Ritchie	*H. E.*	*Orleans, Mass.*
Brown, Elizabeth	*H.E.*	*Peterboro*
Brown, Grace Rita	*A. G.*	*Manchester*
Brown, Ruth Duchesne	*A. G.*	*Manchester*
Bruford, Roger Stewart	*A.G.*	*Roslindale, Mass.*
Buckley, Ruth Ann	*Soc. Ser.*	*Arlington, Mass.*
Bunker, Marion Helen	*A. G.*	*Kingston*
Bushway, Henry Thomas	*A. G.*	*Durham*
Cady, George Luther, 3rd	*C. E.*	*Manchester*
Caldwell, Madeleine Louise	*A. G.*	*Dover*
Cann, Dorothy	*A. G.*	*New Boston*
Carey, William Raymond, Jr.	*Pre-Med.*	*Lawrence, Mass.*
Carlisle, Barbara Louise	*H. E.*	*Concord*
Carr, Thomas Eames	*Gen. Bus.*	*So. Portland, Me.*

Name	Course	P.O. Address
Carrier, John Alden	*M.E.*	*Passaconaway*
Carroll, James Walter	*Chem.*	*Dover*
Casey, Louise Mary	*Soc. Ser.*	*Concord*
Cassidy, Henry Patrick	*Pre-Med.*	*Manchester*
Caulfield, John Lawrence	*A. G.*	*Medford, Mass.*
Cavaric, Frank Lee	*Chem.*	*Kingston*
Chabot, Fred Romeo	*Gen. Bus.*	*Whitefield*
Chamberlin, Nettie Elizabeth	*Chem.*	*Lisbon*
Chamberlin, Phineas Arthur	*Agr.*	*North Haverhill*
Chapman, John Homer	*E. E.*	*Sanbornville*
Chapman, Mary Helga	*A. G.*	*Groveton*
Chase, Muriel Eastman	*A. G.*	*Rochester*
Chesley, Donald Burnham	*A. G.*	*Farmington*
Clark, Earle Drake	*Agr.*	*Northwood*
Clark, Frederick Emery	*Chem.*	*Troy*
Clisham, Barbara	*Soc. Ser.*	*Winthrop, Mass.*
Coe, Jane Fell	*A. G.*	*Manchester*
Cohen, Ruth	*A. G.*	*Winthrop, Mass.*
Colby, Elizabeth	*A.G.*	*Exeter*
Colton, Ruth Emily	*A. G.*	*Hinsdale*
Conon, Olga	*A. G.*	*Berlin*
Couser, James Isaac	*Gen. Bus.*	*Dover*
Cram, Barbara Louise	*A. G.*	*Newmarket*
Craven, Llewellyn Thomas	*Pre-Med.*	*Rye Beach*
Crawford, Marguerita Maria	*Pre-Med.*	*Tilton*
Cummings, Philip Edward	*For.*	*Lyndeboro*
Cummings, Willard Ellsworth	*Pre-Med.*	*Colebrook*
Currier, Richard Colby	*Chem.*	*Amherst*
Currul, Russell Edwin	*Educ.*	*Nashua*
Daeris, Claire Cleopatra	*A. G.*	*Dover*
Dalton, Archie Clark Wallace	*A. G.*	*Manchester*
Daroska, Estella	*H. E.*	*Pittsfield*
Davenport, Alice Whipple	*H. E.*	*South Danbury*
Davidson, Alfred Raymond	*Gen. Bus.*	*Claremont*
Davis, Charles Carpenter	*Educ.*	*Walpole*
Davis, Leonard Waldron	*E.E.*	*Strafford Bow Lake*
Day, George Clayton	*E. E.*	*Durham*

Name	Course	P.O. Address
Decker, John Henry, Jr.	*Gen. Bus.*	*Pt. Washington, N. Y.*
desGarennes, Stephen Philip	*Pre-Med.*	*Hill*
Dimock, William Burton	*E. E.*	*Manchester*
Dodge, Emma May	*A. G.*	*New Boston*
Dodge, Florence Ruth	*Arch.*	*Durham*
Donle, Kenneth Winston	*Chem.*	*Newport*
Doolittle, Herbert Starr	*D. H.*	*New Haven, Conn.*
Dower, Raymond Stanislaus	*A. G.*	*Plaistow*
Drew, Paul Wesley	*A. G.*	*Westfield, N. J.*
Drowns, Elizabeth Stanwood	*H. E.*	*Nashua*
Duffy, Thomas Joseph	*A. G.*	*Concord*
Dupell, Paul Theodore	*A.G.*	*Reed's Ferry*
Durning, Mary Ruth	*A.G.*	*Manchester*
Eastman, Nathan Currier	*Chem.*	*Andover*
Edson, Dean Harding	*Pre-Med.*	*West Lebanon*
Elkins, Peter Graeme	*A. G.*	*Concord*
Ellery, Eleanor Dorothea	*Gen. Bus.*	*Swanzey*
Emery, Samuel Benton	*A. G.*	*Sanford, Me.*
Evans, Allan Venables	*Arch.*	*Claremont*
Ewing, Lyle Wilson, Jr.	*C.E.*	*Claremont*
Fairweather, Thomas Philip	*Gen. Bus.*	*Danville*
Farr, Roger	*D. H.*	*Lebanon*
Farrell, Lloyd Hammond	*E. E.*	*Dover*
Farris, Martha Winslow	*H. E.*	*No. Attleboro, Mass.*
Faulkingham, Lester Halliday	*E. E.*	*Rochester*
Feinauer, Roy Blake	*A. G.*	*Derry*
Fernald, Arthur Thomas	*A. G.*	*Nottingham*
Ferris, Basil Michael	*Pre-Med.*	*Lebanon*
Feuer, Reeshon	*D.H.*	*Marlow*
Ficksman, Samuel Nathan	*A. G.*	*Rochester*
Fitzgerald, Daniel Andrew	*A.G.*	*Durham*
Foote, Richard Ainsworth	*Gen. Bus.*	*Penacook*
Fortier, Norman Lionel	*Pre-Med.*	*Berlin*
Foss, Clayton Smith	*Gen. Bus.*	*Portland, Me.*
Foster, Barbara Elizabeth	*A. G.*	*Lynn, Mass.*
Frank, Louis Lloyd	*C.E.*	*North Woodstock*
Fraser, Elizabeth	*A.G.*	*Manchester*

Name	Course	P.O. Address
Frazer, Lyle Moore	*Agr. Tr.*	*Monroe*
French, Dorothy Louise	*A. G.*	*Merrimack*
French, Margaret Dorothy	*H. E.*	*Milan*
Fudala, Louise Mary	*H. E.*	*Manchester*
Fuller, Carl Willard	*A. G.*	*Durham*
Galleani, Mentana Miriam	*A. G.*	*Durham*
Gardner, Dean Leroy	*C. E.*	*Nashua*
Garland, Martha Louise	*H. E.*	*Manchester*
Garlinski, Virginia	*H. E. Tr.*	*Claremont*
Gelt, Harry	*A. G.*	*Derry*
Gilgun, Charles Frederick	*Educ.*	*Keene*
Glebow, Sophie	*Pre-Med.*	*Boston, Mass.*
Glennon, Thomas Alfred	*Pre-Med.*	*Manchester*
Glickman, Murray Edward	*Pre-Med.*	*Somerville, Mass.*
Goldberg, Thelma	*A. G.*	*Colchester, Conn.*
Goodnow, Leslie Hardy	*Gen. Bus.*	*Keene*
Gordon, Alexander Hendrickson	*For.*	*Danbury, Conn.*
Graham, James William	*Pre-Med.*	*So. Orange, N. J.*
Grant, Jack Chester	*Agr.*	*Buckland, Conn.*
Grant, James White	*Pre-Med.*	*Grafton*
Green, Dorothy Nickerson	*A. G.*	*Hingham, Mass.*
Green, Jerome Sherman	*A. G.*	*Brighton, Mass.*
Griffin, Harry Ervin	*M.E.*	*Canaan*
Hall, John Howard	*Agr. Tr.*	*Monroe*
Halladay, Eleanor Stella	*A. G.*	*Claremont*
Handy, Elizabeth Martha	*A. G.*	*Saco, Me.*
Hanson, Robert Varden	*For.*	*Newton Hlds., Mass.*
Harding, Harold Vernon	*M. E.*	*Farmington*
Harvey, Philip Classon	*Pre-Med.*	*Nashua*
Haseltine, Carroll Edwin, Jr.	*Chem.*	*Haverhill, Mass.*
Haskell, Philip Richard	*M.E.*	*Portland, Me.*
Haubrich, William Palmer	*Hort.*	*Claremont*
Haweeli, Norman	*A. G.*	*Berlin*
Haynes, Arnold Henry	*A. G.*	*Lancaster*
Heald, Lewis Franklin	*A. G.*	*Littleton*
Hemenway, Anna Branch	*A. G.*	*Manchester, Vt.*
Henault, Janet Doris	*A. G.*	*Newport*

Name	Course	P.O. Address
Henderson, Henrietta	*H. E.*	*Durham*
Henrich, Ruth Alta	*Gen. Bus.*	*Plainville, Mass.*
Hepler, Helen Louise	*Chem.*	*Durham*
Hillier, Frederic Folsom	*Gen. Bus.*	*Bridgewater*
Hooker, George Richard	*A.G.*	*Lincoln*
Horne, Paul Edward	*A. G.*	*Wolfeboro*
Huff, Kenneth Purinton	*Gen. Bus.*	*Lynnfield Ctr., Mass.*
Hujsak, Karol Louis	*Chem.*	*Reed's Ferry*
Hultgren, Herbert Nils Gunnar	*Chem.*	*Woburn, Mass.*
Humphrey, Edward Chester	*For.*	*Rochester, Mass.*
Hussey, Allen Sanborn	*Chem.*	*Lancaster*
Isaacson, Clarence Earl	*Pre-Med.*	*Portsmouth*
Ives, Delavan Wooster, Jr.	*M. E.*	*Wallingford, Conn.*
Jackson, Carolyn Florence	*A. G.*	*Portsmouth*
Janetos, **Angeline**	*A. G.*	*Dover*
Janetos, Dionysius Simon	*Pre-Med.*	*Dover*
Jaques, William Everett	*Pre-Med.*	*Newburyport, Mass.*
Jones, Robert Ellis	*For.*	*Lexington, Mass.*
Kafkas, William Christos	*D.H.*	*Dover*
Kalil, John Hanna	*C. E.*	*Manchester*
Kaplan, Melvin Saul	*Pre-Med.*	*Canton, Mass.*
Kay, Joe **Chung**	*C. E.*	*Manchester*
Keniston, Edwin Everett	*A. G.*	*Concord*
Kenney, Harry Ellsworth, Jr.	*Chem.*	*Newmarket*
Kerr, David Cushing	*M. E.*	*Nashua*
Kimball, Howard Emory	*Chem.*	*Falm'h Foreside, Me.*
Kimball, George Henry, Jr.	*Chem.*	*Dover*
Kimball, Melvin Blanchard	*Gen. Bus.*	*Dover*
Kinion, Ambrose Joseph, Jr.	*A.G.*	*Pawtucket, R. I.*
Kirby, Joseph Bernard, Jr.	*Pre-Med.*	*Goffstown*
Knowlton, Robert Bunker	*For.*	*Dover*
Kopka, Mary Sophia	*A. G.*	*Nashua*
Korab, John Joseph	*Pre Med.*	*Middletown, Conn.*
Korpela, Allan Edwin	*A. G.*	*Lebanon*
Korpela, Helvi Ellen	*A. G.*	*Lebanon*
Lackey, William Sherman	*A.G.*	*Cambridge, Mass.*
Landry, Donald Honore	*A. G.*	*Dover*

Name	Course	P.O. Address
Langdon, Frank Holt	*E.E.*	*Lowell, Mass.*
Lawler, Henry James	*Chem.*	*Fremont*
Leary, Frank Joseph	*E.E.*	*Manchester*
Leathers, Bertha May	*A. G.*	*Dover*
Leavitt, Earle Elmer, Jr.	*Chem.*	*Claremont*
LeBlanc, Juliette Virginia Aimee	*A. G.*	*Manchester*
LeClair, Doris Elaine	*A. G.*	*Fremont*
Lee, Eleanor Louise	*A. G.*	*South Kingston*
Leighton, Athalie Davison	*A. G.*	*Center Harbor*
Lennon, John Alexander Luther	*P. H.*	*Dover*
Lessard, Genevieve Anita	*Pre-Med.*	*Nashua*
Levine, I. Samuel	*C.E.*	*Hurleyville, N. Y.*
Levy, Louis	*A. G.*	*Portsmouth*
Lewis, Ann Frances	*Chem.*	*Durham*
Liberty, James Sherman	*Arch.*	*Farmington*
Lincoln, Martyn Hall	*A. G.*	*Manchester*
Lippman, Lillian Freda	*A. G.*	*Manchester*
Little, Arthur Stanley, Jr.	*Gen. Bus.*	*New London*
Lockard, Dorothea Alcyne	*H. E.*	*Claremont*
Lord, Philip Henry	*M.E.*	*Portland, Me.*
Lovett, John Robert	*M. E.*	*Franconia*
McAllister, Ethel Lillian	*H. E.*	*Center Barnstead*
MacAulay, Paul Vincent	*Pre-Med.*	*Concord*
McCarthy, John Dennis	*Gen. Bus.*	*Dover*
McCarthy, John Henry, Jr.	*Chem.*	*Manchester*
McCaugney, Albert James	*Educ.*	*Nashua*
McCrillis, Ruth Medora	*A. G.*	*North Berwick, Me.*
McCrone, Janet Cecelia	*H.E.*	*Dover*
MacDonald, Gordon Adams	*Gen. Bus.*	*Nashua*
MacEachern, John Kitchener	*A. G.*	*Brookline, Mass.*
McEntee, Doris Chase	*H. E.*	*Newburyport, Mass.*
MacGillivray, Ruth Lorraine	*A. G.*	*Pt. Washington, N. Y.*
MacGowan, Cynthia	*Soc. Ser.*	*Concord*
MacIntosh, Maxwell Boyd	*For.*	*Berlin*
MacKay, Thomas Robert	*C. E.*	*Nashua*
McLaskey, Edith Eleanor	*A. G.*	*Dover*
McLaughlin, Laurence Smith	*Pre-Med.*	*Woburn, Mass.*

Name	Course	P.O. Address
McLaughlin, Philip David	*Pre-Med.*	*Nashua*
McLaughlin, Robert James	*M. E.*	*Laconia*
McPhail, George Ernest, Jr.	*A. G.*	*Medford, Mass.*
Magay, Gordon	*Gen. Bus.*	*Worcester, Mass.*
Maillard, Charles Arthur	*A.G.*	*Dover*
Major, Edith Louise	*Arch.*	*East Jaffrey*
Makol, James George	*Pre-Med.*	*Lebanon*
Marinel, Lilyan Thelma	*A. G.*	*No. Chelmsford, Mass.*
Marlow, Clifford Radbourne	*For.*	*New York City*
Marshall, Henry Francis	*E. E.*	*Manchester*
Martin, Gordon Elmer	*A. G.*	*Nashua*
Martineau, Paul Victor	*A.G.*	*Manchester*
Mason, Raigh	*Gen. Bus.*	*Derry*
Mason, Shirley Elizabeth	*Soc. Ser.*	*Manchester*
Maynard, William	*A.G.*	*Plymouth*
Mecklem, Dorothy Ella	*H. E.*	*Philadelphia, Pa.*
Merrill, Rosamond Heaton	*Soc. Ser.*	*Hudson*
Merrill, Sylvia Florence	*Chem.*	*Weymouth, Mass.*
Miles, Edward Benton	*Arch.*	*Putnam, Conn.*
Miltimore, Barbara Nellie	*Soc. Ser.*	*Manchester*
Mitchell, Donald Poole	*A.G.*	*Hyannis, Mass.*
Monfils, Margaret Louise	*A. G.*	*Haverhill, Mass.*
Monfort, Alburta Irene	*H. E.*	*Pt. Washington, N. Y.*
Moore, Helen Elizabeth	*A. G.*	*Freedom*
Morin, Armand Girard	*Agr. Ch.*	*Laconia*
Morin, Francis Joseph	*Chem.*	*Laconia*
Morris, Robert Joseph	*Pre-Med.*	*Berlin*
Morrison, Donna Ivo	*Soc. Ser.*	*Lebanon*
Mulligan, James Joseph	*A.G.*	*Dover*
Mumford, Melba Margaret	*A. G.*	*Nashua*
Murray, Ruth Margaret	*A. G.*	*Penacook*
Nagle, Edward George, Jr.	*Pre-Med.*	*Wakefield, Mass.*
Nash, Robert Mark	*Gen. Bus.*	*West Swanzey*
Nathanson, Norman	*Pre-Med.*	*Manchester*
Nebesky, Anthony Joseph	*Agr.*	*Amesbury, Mass.*
Newcomb, Hermon Freeman	*A. G.*	*Northwood*
Nigro, Joseph John	*A.G.*	*Lebanon*

Name	Course	P.O. Address
Nolan, Joseph James	*A. G.*	*East Jaffrey*
Nutter, John Castle	*M.E.*	*Swampscott, Mass.*
Oakes, Ray Elwood	*A. G.*	*Concord*
O'Connor, James Thomas	*Agr.*	*Woburn, Mass.*
O'Leary, Joseph Ranger	*Gen. Bus.*	*Portsmouth*
O'Neil, Charles Henry, Jr.	*Pre-Med.*	*Nashua*
Osborne, Robert Vincent	*Pre-Med.*	*Newton Junction*
Otis, Donald Bartlett	*Gen. Bus.*	*Concord*
Page, Floyd Nelson	*D.H.*	*Monroe*
Palizza, Maurice Jean	*E. E.*	*Providence, R. I.*
Parker, Truman, Jr.	*Pre-Med.*	*Reed's Ferry*
Parrish, Mary Belle	*A. G.*	*Marblehead, Mass.*
Parsons, Barbara Terry	*A. G.*	*Dover*
Parsons, Louise Marie	*A. G.*	*Laconia*
Payne, Robert James	*For.*	*Nashua*
Payne, Ruth	*A. G.*	*Nashua*
Pease, Harl, Jr.	*Gen. Bus.*	*Plymouth*
Penttila, Elma D.	*A. G.*	*Rindge*
Perkins, Virginia Abbott	*H. E.*	*Charlestown*
Perras, Paul Loren	*A. G.*	*Manchester*
Pettengill, Audrey Mildred	*A. G.*	*Fremont*
Phelps, Dorothy	*A. G.*	*Rockland, Mass.*
Pickard, Elizabeth Whittier	*A.G.*	*Seabrook Beach*
Pickering, Samuel James, Jr.	*C. E.*	*Nashua*
Pickess, Claudia Margaret	*H. E.*	*Franklin*
Pickford, Virginia Mary	*Gen. Bus.*	*Berlin*
Pierce, Pearl Sherwood	*A.G.*	*Nashua*
Platts, Howard Milton	*For.*	*Woodsville*
Plumpton, Russell Annis	*A. G.*	*Manchester*
Pozniak, Victor	*M. E.*	*Claremont*
Pratt, Donna Harriet	*A. G.*	*Rochester*
Pratt, Wendell Eldridge	*For.*	*Water Village*
Preble, Edwin Springer	*M. E.*	*Portsmouth*
Presby, Raymond Henry	*Agr. Tr.*	*Henniker*
Prescott, Arthur Lee	*A.H.*	*Antrim*
Price, Eliot Sewall	*A. G.*	*W. Somerville, Mass.*
Price, Herbert Bragg	*Chem.*	*South Hampton*

Name	Course	P. O. Address
Pullen, Leon Curtis	*Gen. Bus.*	*Portland, Me.*
Quimby, Lloyd Walker	*For.*	*Claremont*
Quinn, William Francis, Jr.	*A.G.*	*Hingham, Mass.*
Raleigh, Walter Prescott	*Gen. Bus.*	*Antrim*
Ramsdell, Frances Nan	*A. G.*	*So. Berwick, Me.*
Read, Edward Rowley	*Chem.*	*Warner*
Redden, Gertrude	*A. G.*	*Dover*
Redden, Louise	*Soc. Ser.*	*Portsmouth*
Reder, Dorothe Ann	*A. G.*	*Lawrence, Mass.*
Reeves, Harold William	*A.G.*	*Melrose, Mass.*
Richards, Mildred	*A. G.*	*Concord*
Richardson, Muriel Rosemary	*Pre-Med.*	*Bradford, Mass.*
Richardson, Russell Beattie	*Chem.*	*Littleton*
Riley, Elizabeth Ann	*A.G.*	*Lawrence, Mass.*
Ripley, George Sherman, Jr.	*Pre-Med.*	*Mt. Vernon, N. Y.*
Rivers, William James	*A. G.*	*Rutland, Vt.*
Rocker, Thomas Barr	*M.E.*	*Newmarket*
Rodrigues, John Gordon	*Pre-Med.*	*Newmarket*
Rosen, William	*A. G.*	*Newmarket*
Rowe, Bette Ingred	*A.G.*	*Dover*
Rowe, James Milton	*A. G.*	*Exeter*
Rutledge, Esther Ann	*A.G.*	*Durham*
Rutkauskas, John, Jr.	*C. E.*	*Haverhill, Mass.*
Safir, Edwin	*A.G.*	*So. Norwalk, Conn.*
Samiec, William	*A. G.*	*Claremont*
Sampatacos, Peter Michael	*M.E.*	*Dover*
Sanborn, Russell Theodore	*A.G.*	*Sanbornton*
Schilling, Falko Max	*E. E.*	*Manchester*
Schlesinger, Patricia Margaret	*A. G.*	*Franklin*
Scott, William Walter	*C. E.*	*Winthrop, Mass.*
Scruton, Horace Stedman	*A. G.*	*Rochester*
Sculos, John Straty	*Gen. Bus.*	*Portsmouth*
Shapiro, Irving Milton	*Pre-Med.*	*N. Westchester, Conn.*
Shaw, Bernard	*A.G.*	*Dover*
Shea, Leonard Ignatius	*Pre-Med.*	*Portsmouth*
Sheehan, Joseph Denis	*A.G.*	*Manchester*
Sheffield, Henry Francis	*Agr.*	*South Hampton*

Name	Course	P.O. Address
Sheldon, John Warren	*Gen. Bus.*	*Berlin*
Shields, Barbara Anne	*A. G.*	*Berlin*
Sibley, Frederic Evans	*Pre-Med.*	*Bradford, Mass.*
Sinclair, Robert Young	*For.*	*Gorham*
Skillin, Russell Thomas	*A. G.*	*Portland, Me.*
Small, Gardner Ramsey	*For.*	*Pittsfield*
Small, George Franklin	*Hort.*	*Maplewood, N. J.*
Smalley. Louise	*H. E.*	*East Lynn, Mass.*
Smith, Geraldine Estelle	*A.G.*	*Manchester*
Smith, Victor Winston	*M. E.*	*Hinsdale*
Snow, Parker DeWitt	*Gen. Bus.*	*Charlestown*
Spaulding, Robert John	*For.*	*Laconia*
Spinney, Lewis Charles	*For.*	*Conway*
Stanton, Daniel Joseph	*Arch.*	*Wilton*
Stearns, Mary Louise	*Soc. Ser.*	*Hancock*
Stevenson, Gratton Allison	*Pre-Med.*	*Queens Village, N. Y.*
Stewart, Lawrence James	*A. G.*	*Center Barnstead*
Stone, Alton Wallace	*M. E.*	*Exeter*
Strout, Donald Leslie	*Pre-Med.*	*Keene*
Swain, Beverly	*A. G.*	*Concord*
Swallow, Lawrence Barr	*A.G.*	*Manchester*
Swenson, Karl Eklund	*M. E.*	*Concord*
Swett, Alan Milton	*A. G.*	*Antrim*
Tabb, Donald Cameron	*Gen. Bus.*	*Penacook*
Teague, Adelbert Frederick	*A. G.*	*Mt. Sunapee*
Tenney, Frank Forster, Jr.	*M. E.*	*Manchester, Mass.*
Terrill, William Lester	*For.*	*Pittsburg*
Thayer, Thomas Julius	*Pre-Med.*	*Epping*
Thompson, Mildred Eleanor	*Chem.*	*Sanford, Me.*
Thompson, Paul Raymond	*Gen. Bus.*	*Berlin*
Thompson, John Reginald	*Pre-Med.*	*Berlin*
Thyng, Harrison Reed	*A.G.*	*Barnstead*
Tibbetts, Gordon Edward	*Chem.*	*Manchester*
Tilton, Robert Pierce	*A. G.*	*Laconia*
Timberlake, Augusta Grover	*A. G.*	*Portland, Me.*
Tinker, Joseph William	*Pre-Med.*	*So. Berwick, Me.*
Tondreault, Jeannette Marie	*A. G.*	*Nashua*

Name	Course	P. O. Address
Tower, Gordon Cummings	*Agr.*	*Lyndeboro*
Trojano, Harold Domonick	*For.*	*Laconia*
Tumel, Frances Marion	*Educ.*	*Concord*
Tuttle, Sherwood Dodge	*A. G.*	*Hancock*
Uicker, George Bernard	*M. E.*	*Derry*
Upton, Margery Gladys	*A. G.*	*Hancock*
Urban, Peter Leon	*Chem.*	*Claremont*
VanDyke, Barbara Alice	*H.E.*	*Kennebunk, Maine*
Vangjel, Zissi Mihal	*A. G.*	*Northfield*
Vanni, Anita Sara	*H.E.*	*Peterboro*
Waldron, George Franklin	*Gen. Bus.*	*Dover*
Ward, Leslie James	*Agr.*	*Monroe*
Warren, Albion Wadsworth, Jr.	*M. E.*	*Portsmouth*
Watkins, Arthur Scott	*E. E.*	*Walpole*
Webb, Louise Haines	*Soc. Ser.*	*Newmarket*
Weinstat, Judith Esther	*A. G.*	*Claremont*
Weisberg, Philip	*Pre-Med.*	*Chelsea, Mass.*
Wescott, Benjamin Walter	*D.H.*	*Contoocook*
West, Rosetta Augusta	*H. E.*	*Concord*
White, William Mansfield	*Pre-Med.*	*Smithtown*
Whitney, Jean	*A. G.*	*Worcester, Mass.*
Wilcox, Hollis Carleen	*A. G.*	*Concord*
Wilder, Norman Gardner	*For.*	*Wakefield, Mass.*
Williams, Robert Frank	*E. E.*	*Portland, Me.*
Wilson, Wilfred Kelso	*Chem.*	*Newton*
Winer, Samuel Robert	*A. G.*	*Nashua*
Winterton, William Baybutt	*A. G.*	*Manchester*
Wiskup, Edward	*Educ.*	*Manchester*
Wood, Harry Fred, Jr.	*Gen. Bus.*	*Plymouth*
Woodbury, William Walter	*Pre-Med.*	*Manchester*
Woodward, Elliot Barnes	*A. G.*	*Walpole*
Wright, Glenn Chessley	*C. E.*	*Rochester*
Wyatt, Willa Addis	*A. G.*	*Portsmouth*
Wyman, Louis Crosby	*A. G.*	*Manchester*
Young, Duane Eugene	*For.*	*Kensington*
Young, Lavinia Madelyn	*A.G.*	*W. Stewartstown*
Zagreski, Steve Joseph	*M. E.*	*Laconia*
Zeive, Leonard	*Agr.*	*Manchester*

FRESHMEN

(Men, 361; Women, 157; Total, 518)

Name	Course	P.O. Address
Actor, Bernard	*Pre-Med.*	*Portsmouth*
Adams, Miriam	*A.G.*	*Derry*
Adams, Ptolemy Arthur	*A.G.*	*Waltham, Mass.*
Adnoff, Esther Lillian	*A.G.*	*Dover*
Aldrich, Waldo Merrifield	*C.E.*	*Keene*
Archibald, John Frederick	*Pre-Med.*	*Plymouth*
Atwood, Allen Minot	*Agr.*	*Franklin*
Ayer, Francis Hall	*M.E.*	*Stoddard*
Ayer, Franklin Alvin	*M.E.*	*Stoddard*
Bacon, Mildred Lula	*A.G.*	*Jefferson*
Bagley, Thomas Roy	*For.*	*Woodsville*
Bailey, Avis Ethel	*A.G.*	*Hampstead*
Baker, Grayce Elizabeth	*A.G.*	*Sunapee*
Balch, Charles Russell	*A.G.*	*Lyme*
Barkin, David Gabriel	*A.G.*	*Brookline, Mass.*
Barney, Albert Lafayette	*For.*	*Grafton*
Barney, Bessie Aroline	*H.E.*	*Manchester*
Barrett, James Franklin	*Agr.*	*Bristol*
Bartlett, George Henry	*For.*	*Grasmere*
Bartlett, Helen Fayette	*H.E.*	*Warner*
Batchelder, Lew Alan	*M.E.*	*Concord*
Bayrer, Ralph Winslow	*M.E.*	*Portsmouth*
Bean, Arthur Edward, Jr.	*A.G.*	*Concord*
Beckingham, Kathaleen E. Rita	*A.G.*	*Dover*
Benner, Stanley Graves	*A.G.*	*Manchester*
Bennett, Nelson Archie	*For.*	*Lancaster*
Berkowitz, Regina Claire	*Pre-Med.*	*New Rochelle, N. Y.*
Betley, Phyllis Anne	*A.G.*	*Manchester*
Betty, Dorothy Irvina	*A.G.*	*Exeter*
Betz, Charles Henry, Jr.	*A.G.*	*Woodhaven, N. Y.*
Bezanson, Robert Osborne	*Chem.*	*Woburn, Mass.*
Bilbruck, James Donald	*Hort.*	*Kittery, Maine*
Bills, Leon William, Jr.	*A.G.*	*Milford*
Binder, William Harry	*A.G.*	*Keene*
Bissell, Lewis Prouty	*For.*	*East Wolfeboro*

NAME	COURSE	P.O. ADDRESS
Bix, Samuel	*Gen. Bus.*	*Nashua*
Blackwood, John Benjamin	*For.*	*Concord*
Blood, Charles James	*A.G.*	*Rochester*
Bortas, Leonarda Susan	*A.G.*	*Hudson*
Bowen, Bradleigh	*A.G.*	*Claremont*
Bowen, Gilman Wells	*Chem.*	*Claremont*
Bradlee, Robert Morton, Jr.	*Pre-Med.*	*Portsmouth*
Braun, Richard David	*Gen. Bus.*	*Woodhaven, N. Y.*
Breck, Robert Williams	*For.*	*Upper Montclair, N. J.*
Briggs, Wilbert Otis, Jr.	*Pre-Med.*	*Warner*
Britten, Leslie Latimer	*For.*	*Brandon, Vt.*
Brosius, Donald Joseph	*M.E.*	*Berlin*
Brown, Carleton Wesley	*Gen. Bus.*	*Manchester*
Brown, Raymond Harry	*Chem.*	*Dover*
Buchanan, Creeley Shepard	*A.G.*	*Rochester*
Buck, Margaret Marylouise	*A.G.*	*Manchester*
Buczynski, Julian Joseph	*Agr.*	*Franklin*
Bulger, John Pershing	*E.E.*	*Hudson*
Bullock, Clifford Winsor	*P.H.*	*Keene*
Burch, Howard William	*M.E.*	*Provincetown, Mass.*
Burns, Louise Geraldine	*A.G.*	*Berlin*
Burque, Eloise Jessie	*A.G.*	*Nashua*
Burrill, Larkin Hosford	*A.G.*	*Monroe*
Burroughs, Ralph John, Jr.	*M.E.*	*Sanbornville*
Burt, Richard Hale	*M.E.*	*Portsmouth*
Calvetti, William Joseph	*Gen. Bus.*	*Milford*
Campbell, Maxwell Stewart	*Pre-Med.*	*Wilmot*
Carey, Franklin Albert	*Gen. Bus.*	*Keene*
Carlson, Arthur	*A.G.*	*Concord*
Carpenter, Katharine Lamie	*A.G.*	*Newmarket*
Carpenter, Mary Eaton	*A.G.*	*Lancaster*
Carr, Arthur Thomas	*E.E.*	*Newport*
Carruth, Ralph Owen	*Chem.*	*Manchester*
Carson, Marie Elizabeth	*A.G.*	*Noank, Conn.*
Cashman, Sophie	*A.G.*	*East Natick, Mass.*
Chadwick, David Henry	*M.E.*	*Sutton*
Chagnon, Maurice Emile	*Pre-Med.*	*Nashua*

FRESHMEN

Name	Course	P.O. Address
Chamberlin, Kate Elizabeth	*A.G.*	*North Haverhill*
Chamberlain, Ray Young	*A.G.*	*Watertown, Mass.*
Chapman, Hugh James	*Agr.*	*Alton*
Chandler, Kathleen Olive	*A.G.*	*Barnstead*
Charity, Leon Francis	*A.G.*	*Chester*
Chase, Barbara Bailey	*A.G.*	*Manchester*
Chase, Joseph Ranlet	*A.G.*	*Laconia*
Cheney, Barbara Ellen	*A.G.*	*Manchester*
Cheney, Hellen Tyrrell	*Soc. Ser.*	*Dover*
Chretien, Thomas Edward	*Pre-Med.*	*Portsmouth*
Clement, Shirley Elizabeth	*A.G.*	*Nashua*
Codaire, Margery June	*A.G.*	*Melrose, Mass.*
Cohen, Judith Sylvia	*A.G.*	*Portsmouth*
Collins, Alice Marie	*A.G.*	*Somersworth*
Colman, Alice Carlton	*A.G.*	*Rochester*
Coplen, Leonard Edward	*A.G.*	*Boston, Mass.*
Corbin, Dorothy Mae	*A.G.*	*Portsmouth*
Corcoran, James Leonard	*M.E.*	*Manchester*
Cordeau, June Ethel	*A.G.*	*Lancaster*
Costanzo, Alfred Orlando	*Gen. Bus.*	*Manchester*
Coutts, Lloyd George	*For.*	*Gonic*
Crane, Dorothy Verda	*A.G.*	*Everett, Mass.*
Cree, Margery Janice	*A.G.*	*Colebrook*
Cronin, Francis Wright	*Chem.*	*Manchester*
Crouch, Dorothy Emogene	*A.G.*	*Dover*
Crowley, Raymond Woodbury	*M.E.*	*Franklin*
Cudhea, Ralph Vernon	*Arch.*	*Nashua*
Cunningham, Phyllis	*A.G.*	*Merrimack*
Currier, Cedric Edward	*Chem.*	*Claremont*
Cushing, Frederick Goss, Jr.	*Chem.*	*Lebanon*
Dane, Andrea	*A.G.*	*Nashua*
Daniels, Olive Louise	*Pre-Med.*	*Durham*
Dauphin, Albert Philias	*A.G.*	*Claremont*
Davidson, Donald Thomas	*C.E.*	*Concord*
Davis, Beverley Clara	*Soc. Ser.*	*Hollis*
Davison, Ruth Elaine	*A.G.*	*Manchester*
Davison, Warren Rupert	*Pre-Med.*	*Melrose, Mass.*

Name	Course	P.O. Address
Demerse, Barbara June	*A.G.*	*Alstead*
Diemond, LeRoy Heath	*M.E.*	*Bennington*
Dillon, Elizabeth Newton	*A.G.*	*Athol, Mass.*
Diemond, Stuart James	*M.E.*	*Franklin*
Diniak, Albert William	*Pre-Med.*	*Dover*
Drew, Warren Edwin	*A.G.*	*Colebrook*
Duffy, Eugene Norman	*A.G.*	*Lebanon*
Duley, George Erwin, Jr.	*Chem.*	*East Kingston*
Dunlap, Philip Stanley	*A.G.*	*Concord*
Dunn, Raymond Bennett	*C.E.*	*Concord*
Durst, Gus William	*For.*	*Winsted, Conn.*
Durst, John Hudson	*For.*	*Winsted, Conn.*
Dwyer, Charles Allison	*A.G.*	*Nashua*
Dyke, Virginia Harlene	*A.G.*	*Atkinson*
Eastman, Jay Fred, Jr.	*A.G.*	*Sunapee*
Eastman, Helen Mildred	*H.E.*	*Dover*
Eaton, Leslie Alvado	*M.E.*	*Seabrook*
Eckhardt, Doris Josephine	*A.G.*	*Manchester*
Edgerly, Albert David	*Agr.*	*Pittsfield*
Egan, Donald Herbert	*A.G.*	*East Hampstead*
Eggleston, John Leonard	*Arch.*	*Sunapee*
Elgosin, Frederick Joseph	*Pre-Med.*	*Whitefield*
Elliott, Alma Ethel	*A.G.*	*Laconia*
Emery, Priscilla	*H.E.*	*Portsmouth*
Erb, George Leslie	*Chem.*	*Newtown, Conn.*
Ermer, Arthur William	*A.G.*	*North Salem*
Evans, Judith	*A.G.*	*Berlin*
Fernald, Alfred Elwell	*C.E.*	*Nottingham*
Ferris, Walter Harrison	*Gen. Bus.*	*Manchester*
Ferry, Allan Barton	*Chem.*	*Alton Bay*
Fisher, Robert Knight	*A.G.*	*Laconia*
Fishman, Beatrice Victoria	*A.G.*	*Dover*
Fisk, Robert Harold	*M.E.*	*North Weare*
Fletcher, John Rollins	*Chem.*	*Concord*
Fletcher, Robert Dearborn	*Chem.*	*Concord*
Flint, Gordon Bennett	*A.G.*	*North Newport*
Foggett, Charles Malcolm	*Chem.*	*Intervale*
Foley, Margaret Jane	*M.E.*	*Portsmouth*

FRESHMEN

Name	Course	P.O. Address
Ford, William Joseph	*A.G.*	*Concord*
Fontaine, Milton	*A.G.*	*Peterboro*
Foster, Warren Curtis	*E.E.*	*Laconia*
Fournier, Maurice Gerard	*Gen. Bus.*	*North Attleboro, Mass.*
Franklin, Irving Lloyd	*C.E.*	*Haverhill, Mass.*
Freedman, Marjorie	*A.G.*	*Salem, Mass.*
Freeman, Mary Gaffney	*A.G.*	*Exeter*
Fulton, Donald Samuel	*Gen. Bus.*	*North Woodstock*
Gaffney, James Gerard	*Pre-Med.*	*Winchester, Mass.*
Galanes, Peter Ernest	*E.E.*	*Dover*
Gale, Gaylord Charles	*C.E.*	*Newport*
Gallyon, Mary Whitmore	*A.G.*	*Marblehead, Mass.*
Garabrant, Russell Eugene	*Pre-Med.*	*East Jaffrey*
Garbarino, John Joseph	*A.G.*	*Brockton, Mass.*
Garvey, James Michael	*Gen. Bus.*	*Lawrence, Mass.*
Gerrish, Leona Pearl	*A.G.*	*Rye*
Gersh, Irving Stan	*A.G.*	*Roxbury, Mass.*
Gile, David Albert	*M.E.*	*Lochmere*
Gile, Frances Watson	*H.E.*	*Lochmere*
Gilman, Louis Samuel	*A.G.*	*Manchester*
Goertz, Conrad Thomas Mitchell	*Chem.*	*Alton*
Goldfarb, Eugene Walter	*A.G.*	*New Bedford, Mass.*
Goodhue, Natalie Elizabeth	*Hort.*	*Wolfeboro*
Goodman, Esther	*A.G.*	*Lowell, Mass.*
Goodman, Harold Hardy	*Pre-Med.*	*Manchester*
Goodrum, Clyde Amis	*A.G.*	*Westmoreland Depot*
Goodwin, Harriett Louise	*Chem.*	*Waltham, Mass.*
Goodwin, John Robert	*M.E.*	*Enfield*
Gorman Lorraine Ashton	*Gen. Bus.*	*Littleton*
Gould, Ernest Morton, Jr.	*For.*	*Waban, Mass.*
Gowen, Janice	*A.G.*	*Stratham*
Grace, Thomas Mathew, Jr.	*Chem.*	*Portsmouth*
Grady, Ruth Marie	*A.G.*	*East Derry*
Grasso, Rosario Joseph	*M.E.*	*Milford*
Greer, William Edward Rose	*Pre-Med.*	*Portsmouth*
Griffin, Gerald Joseph	*Gen. Bus.*	*Waltham, Mass.*
Griffin, Roy Goodhue	*Agr. Tr.*	*Portsmouth*

Name	Course	P.O. Address
Guild, George Herbert	*Gen. Bus.*	*Nashua*
Hadley, David Carroll	*A.G.*	*Henniker*
Hadley, Merle Genevieve	*A.G.*	*Haddonfield, N. J.*
Hall, Allan Keith	*For.*	*Enfield*
Hall, Forest Freeman, Jr.	*M.E.*	*Westmoreland Depot*
Halpern, Bertha Lillian	*A.G.*	*Brooklyn, N. Y.*
Hamblett, Maurice Franklin	*M.E.*	*Somersworth*
Hanlon, John Douglas	*A.G.*	*Winchester, Mass.*
Happny, William Grant	*Gen. Bus.*	*Concord*
Hardy, Albert Leonard	*M.E.*	*Hudson*
Hardy, Ruth Adelaide	*H.E.*	*Hollis*
Harmon, Karl Storer	*A.G.*	*Springvale, Maine*
Harriman, Elizabeth	*H.E.*	*Providence, R. I.*
Hartshorn, Earl Dexter	*A.G.*	*Manchester*
Haseltine, Robert Chase	*Chem.*	*Haverhill, Mass.*
Hay, Richard Henry	*Gen. Bus.*	*Portsmouth*
Haynes, Harry Leonard	*For.*	*Portsmouth*
Hayward, William Owen	*For.*	*Chester*
Heath, Carl William	*E.E.*	*Manchester*
Height, Dan Ainslie	*For.*	*Winchester*
Helin, Taimi	*A.G.*	*Milford, Mass.*
Henderson, Philip Robert	*A.G.*	*Dover*
Hersey, John Loring	*A.G.*	*Portsmouth*
Hibbert, Leslie Eugene, Jr.	*M.E.*	*Laconia*
Hickey, William Colby	*M.E.*	*Rockville Center, N. Y.*
Higgins, Alfred Harrison	*For.*	*Exeter*
Hillson, Ruth Lillian	*A.G.*	*Malden, Mass.*
Hirschner, Luella Dorothy	*A.G.*	*Derry*
Hodgdon, Philip Walker	*A.G.*	*Portsmouth*
Hodsdon, Caleb Lawrence	*E.E.*	*Portsmouth*
Holt, Martin Ellsworth	*A.G.*	*Nashua*
Honkala, Frederick Saul	*Chem.*	*Salisbury*
Huddleston, John Sprague	*A.G.*	*Durham*
Hurley, Daniel Benjamin	*A.G.*	*Center Ossipee*
Hutton, Mildred Eunice	*A.G.*	*Derry*
Ingram, Alvin Richard	*Chem.*	*Enfield*
Isenberg, Jean Ann	*A.G.*	*Dorchester, Mass.*

FRESHMEN

Name	Course	P.O. Address
Isherwood, Roland Chapman	*Arch.*	*Berlin*
Ivers, Richard Warner	*A.G.*	*Pelham*
James, Marion Ella	*A.G.*	*Durham*
Jamgochian, Elijah	*Agr.*	*Salem Depot*
Jarvis, Robert Colebrook	*Gen. Bus.*	*Worcester, Mass.*
Jenkins, Donald Edmund	*A.G.*	*Keene*
Jenkins, Everett Kelley, Jr.	*C.E.*	*Loudon*
Jennison, Harold Francis, Jr.	*M.E.*	*Lee*
Jewett, Frances Mary	*A.G.*	*Reading, Mass.*
Johnson, Herbert Austin	*A.G.*	*Putnam, Conn.*
Johnson, Philip Colony	*Chem.*	*Wilton*
Johnson, Richard Henry	*Gen. Bus.*	*Concord*
Johnson, Thomas Frederick	*A.G.*	*Arlington, Mass.*
Johnston, Philip John	*Gen. Bus.*	*Schenectady, N. Y.*
Jones, Dorothy Virginia	*A.G.*	*Lakeport*
Jones, George Edward, Jr.	*Hort.*	*West Hartford, Conn.*
Jones, William Brayton, Jr.	*A.G.*	*Concord*
Jordan, William Raymond	*For.*	*Conway Center*
Kalil, Fred	*Pre-Med.*	*Manchester*
Karosas, Louis Peter	*A.G.*	*Nashua*
Keefe, Elizabeth Marie	*A.G.*	*Dover*
Kelley, Hernaldo Richard	*A.G.*	*Provincetown, Mass.*
Kelligrew, Madeline Catherine	*A.G.*	*Franklin*
Kenison, Frank Kenneth	*For.*	*North Conway*
Kew, John Kendall	*A.G.*	*Keene*
Kichline, Thomas Peter	*Chem.*	*Durham*
Knight, Alma Frances	*A.G.*	*Hillsboro*
Lackey, Donald Pease	*A.G.*	*Cambridge, Mass.*
Laflamme, Leo Adrien	*Pre-Med.*	*Manchester*
Laighton, Garrett	*Gen. Bus.*	*Portsmouth*
Lamb, Harold Wendell	*Pre-Med.*	*Plymouth*
Lamson, Hugh	*M.E.*	*Goffstown*
Lane, James Rossell	*E.E.*	*Exeter*
Lane, Margaret Mary	*A.G.*	*Franklin*
Lankalis, Joseph Michael	*A.G.*	*Bridgewater, Mass.*
Lapeza, Chester Robert	*M.E.*	*Nashua*
Lapoint, Roger Joseph	*A.G.*	*Derry Village*

Name	Course	P.O. Address
Laramie, George Henry	*For.*	*Enfield*
Larson, Dana Francis	*A.G.*	*Boston, Mass.*
Lawson, Donald Alexander	*Gen. Bus.*	*Stoneham, Mass.*
Leavitt, Solomon	*Gen. Bus.*	*Haverhill, Mass.*
Leocha, Victor Stanley	*Pre-Med.*	*Claremont*
Lester, Gardiner Alfred	*Agr.*	*Reading, Mass.*
Lewis, Robert Dean	*Gen. Bus.*	*Concord*
Libbey, Constance Alice	*A.G.*	*East Rochester*
Lider, Milton Sidney	*A.G.*	*New Bedford, Mass.*
Livingston, Ralph	*Chem.*	*Keene*
Loiselle, Donald William	*C.E.*	*West Concord*
Lord, Robert Linwood	*M.E.*	*Somersworth*
Lord, Ruth Cora	*H.E.*	*Francestown*
Loughlin, Anne Winifred	*H.E.*	*Dover*
Lovell, Kenneth Roscoe	*M.E.*	*Portsmouth*
Lunt, Wilma Florence	*A.G.*	*Rochester*
Lurinsky, Henry	*Pre-Med.*	*Dover*
McAlpine, Bryant Edgar	*Gen. Bus.*	*Concord*
McCaffrey, George William	*Gen. Bus.*	*Lincoln*
McCartney, Sidney Wicks	*M.E.*	*Dover*
McClary, Howard Carleton	*A.G.*	*Salem Depot*
McCrillis, Frances Rachel	*A.G.*	*Manchester*
McCrone, Elizabeth Margaret	*Pre-Med.*	*Dover*
McDermott, Arthur William	*Educ.*	*Franklin*
MacDonald, Douglas Halliday	*For.*	*Nashua*
McDonough, Louis William	*Pre-Med.*	*Manchester*
McFadyen, Eugene John	*M.E.*	*Lincoln*
McIntire, Rachel Burnham	*A.G.*	*South Essex, Mass.*
McLaren, Ian Robert	*A.G.*	*Alstead*
MacMartin, Marion Patricia	*Pre-Med.*	*Wolfeboro*
McMaster, Arlene Helen	*A.G.*	*Salem*
McNally, Frances Loretta	*A.G.*	*Attleboro, Mass.*
McVey, Warren Clarence	*A.G.*	*Laconia*
MacKenzie, Ruth Irene	*A.G.*	*Newport*
Madden, Arthur John, Jr.	*Chem.*	*Somersworth*
Mahoney, Mary Frances	*A.G.*	*North Andover, Mass.*
Manton, Albert Cecil	*A.G.*	*Berlin*

FRESHMEN

Name	Course	P. O. Address
Maron, Ruth	*H.E.*	*Westwood, N. J.*
Marsh, Charles Smith	*Agr.*	*Ashland*
Marsh, Mary Alice	*H.E.*	*Ashland*
Marshall, Stuart Arthur	*Gen. Bus.*	*Orford*
Martineau, Paul Victor	*A.G.*	*Manchester*
Mathaisell, Rudolph Adolph, Jr	*M.E.*	*Tilton*
Matthews, Margaret Ann	*A.G.*	*Troy, N. Y.*
Mauricette, Eleanor Florence	*A.G.*	*Dover*
Maynard, Norman Leland	*Chem.*	*Concord*
Merrill, Gertrude Margaret	*A.G.*	*Littleton*
Metcalf, Katharine	*A.G.*	*Newport*
Metcalf, Margaret Mary	*Soc. Ser.*	*West Springfield*
Michaud, Edward Ludger	*Chem.*	*Rollinsford*
Miliner, Robert Alden	*Pre-Med.*	*Concord*
Miller, Samuel Stanley	*A.G.*	*Newton Centre, Mass.*
Mills, Roy Herbert	*A.G.*	*Manchester*
Mitchell, Burton Irvine	*Chem.*	*Saco, Maine*
Mitchell, Harold Newton	*Agr.*	*Plymouth*
Mooney, Benjamin William, Jr.	*A.G.*	*North Rochester*
Moore, Dorothy June	*A.G.*	*Milford*
Moore, Merrill Preston	*Gen. Bus.*	*Manchester*
Moore, Rachel Carolyn	*H.E.*	*Peterboro*
Moore, Robert Hugh	*E.E.*	*Melrose, Mass.*
Moore, William Bancroft, Jr.	*M.E.*	*West Peabody, Mass.*
Moran, Winifred Mary	*A.G.*	*Woodsville*
Morang, Phyllis Nathalia	*Educ.*	*Portsmouth*
Moriarty, Mary Clare	*A.G.*	*Durham*
Morrison, Robert Hugh	*A.G.*	*Derry*
Mott, Philip Vaughn	*M.E.*	*Rochester*
Muggleston, Frank Albert	*A.G.*	*Rochester*
Mullen, Arthur Thomas, Jr.	*Hort.*	*West Concord, Mass.*
Mulman, Myer	*Chem.*	*Manchester*
Murray, Marjorie Verna	*H.E.*	*Dover*
Muzzey, Janice Gertrude	*A.G.*	*Laconia*
Myhre, Carolyn	*A.G.*	*Portsmouth*
Myhre, Katherine	*A.G.*	*Portsmouth*
Nason, Maurice Clifton	*Chem.*	*Rochester*

Name	Course	P.O. Address
Nellson, Richard Freeman	*A.G.*	*Pittsfield*
Nichols, Eleanor Frances	*A.G.*	*North Weare*
Norton, John Frederick	*Chem.*	*Dover*
Norton, Mabel Elizabeth	*A.G.*	*Hampton*
Noseck, Kenneth Alexander	*For.*	*Winchester*
Noyes, Bernard Bradbury	*M.E.*	*Laconia*
Noyes, Eloise Ethel	*A.G.*	*Plaistow*
O'Connor, Leo Henry	*Gen. Bus.*	*Lynn, Mass.*
O'Connor, Raymond Henry	*A.G.*	*Berlin*
O'Connor, Regis Edward	*A.G.*	*Berlin*
Osman, Seymour	*Gen. Bus.*	*Salem, Mass.*
Otis, Milton Shattuck	*Gen. Bus.*	*Bradford, Mass.*
Ozog, Julius John	*A.G.*	*Franklin*
Palmer, Donald Clinton	*A.G.*	*Rochester*
Parker, Harry Alfred	*Pre-Med.*	*Reed's Ferry*
Parr, Harry Alfred, Jr.	*For.*	*Hampton*
Patch, Norman Theodore	*A.G.*	*East Rochester*
Patten, Raymond Bostwick	*Gen. Bus.*	*Port Washington, N.Y.*
Peart, Mary Dorothea	*A.G.*	*Derry*
Perkins, Robert Warren	*Chem.*	*Schenectady, N. Y.*
Perkins, Wendell Elmore	*Pre-Med.*	*Franklin*
Perras, Irvin Maurice	*M.E.*	*Manchester*
Perron, Frank Ernest, Jr.	*A.G.*	*Manchester*
Person, Herbert George	*Chem.*	*Plymouth*
Peterson, Fredericka Maud	*H.E.*	*Colebrook*
Pettee, Robert Holmes	*A.G.*	*Durham*
Phillips, Barbara	*H.E.*	*East Candia*
Pickard, Geraldine	*A.G.*	*Seabrook Beach*
Pickering, Ervin Malcolm	*Pre-Med.*	*Enfield*
Pickford, Virginia Mary	*Gen. Bus.*	*Berlin*
Pierce, Lester Ward, Jr.	*For.*	*Rochester*
Pioli, Alfred Otto	*A.G.*	*Peterborough*
Piretti, Ario Walter	*For.*	*Barre, Vt.*
Pitman, Arthur Leslie	*For.*	*Laconia*
Plodzik, Edward Walter	*A.G.*	*Manchester*
Plumpton, David Chapman	*A.G.*	*Manchester*
Poor, Albert Arthur	*M.E.*	*Antrim*

FRESHMEN

Name	Course	P.O. Address
Porter, Arthur Edmund	*A.G.*	*Manchester*
Power, Eli Edward	*Gen. Bus.*	*Marblehead, Mass.*
Preo, Paul Hubert	*Chem.*	*Berlin*
Prescott, Norman Francis	*A.G.*	*Kensington*
Price, Leslie Frank	*Chem.*	*Concord*
Price, Pauline Priscilla	*A.G.*	*Salem, Mass.*
Prince, Nathan Dennett	*M.E.*	*Hingham, Mass.*
Pudiack, Susanne Marie	*A.G.*	*Binghamton, N. Y.*
Pulsifer, Louise Maude	*H.E.*	*Plymouth*
Putnam, Lillian Medora	*H.E.*	*Claremont*
Quinn, John Stephen	*Gen. Bus.*	*Hingham, Mass.*
Rackliffe, Janet Gray	*A.G.*	*New Britain, Conn.*
Rainey, John Walter	*Gen. Bus.*	*New Boston*
Ramage, Archy Plenderleith	*Pre-Med.*	*Lincoln*
Randall, Carl Osgood, Jr.	*Gen. Bus.*	*North Conway*
Raybold, Henry Knight	*A.G.*	*Exeter*
Raynes, John Charles	*Agr. Tr.*	*Chester*
Raynes, Paul Mackintosh	*P.H.*	*Chester*
Reder, Ann	*A.G.*	*Lawrence, Mass.*
Reed, Gardner Chase	*Gen. Bus.*	*Wakefield, Mass.*
Reid, John Adam, Jr.	*Chem.*	*West Chelmsford, Mass.*
Reinherz, Natalie Sylvia	*A.G.*	*Chelsea, Mass.*
Richards, Charles Henry	*A.G.*	*Portsmouth*
Richards, Elisabeth	*A.G.*	*Suncook*
Richards, Nagella Eunice	*A.G.*	*Rochester*
Richardson, Jack Ulmer	*For.*	*Tuftonboro*
Richardson, John Sammis	*M.E.*	*Stratford, Conn.*
Richardson, Robert Lee	*A.G.*	*Lakeport*
Riley, Elizabeth Ann	*A.G.*	*Lawrence, Mass.*
Robinson, Lillian Lois	*H.E.*	*Portsmouth*
Robinson, Mary Sherman	*A.G.*	*Falls Church, Va.*
Rogers, George Burnet	*Agr. Tr.*	*Northwood Center*
Rollins, Byron Benjamin	*Chem.*	*Franklin*
Roper, Mark William	*Chem.*	*Tewksbury, Mass.*
Roper, Robert Lee	*Chem.*	*Tewksbury, Mass.*
Roulier, Albert Philip	*A.G.*	*Laconia*

Name	Course	P. O. Address
Rowell, John Charles	*Chem.*	*Concord*
Roy, Charles Blake	*Agr. Tr.*	*Barnet, Vt.*
Roy, Robert Tennyson	*Chem.*	*East Walpole, Mass.*
Sanborn, Barbara Laura	*A.G.*	*Exeter*
Sanborn, William Edson	*C.E.*	*Fremont*
Sanders, Dorothy Louise	*A.G.*	*Rochester*
Sanderson, Carroll Emery	*Agr. Tr.*	*Boscawen*
Sanderson, William Rivers	*Gen. Bus.*	*Mount Vernon, N. Y.*
Sandler, Gwendolyn Phyllis	*A.G.*	*Lawrence, Mass.*
Sarson, Mary Elizabeth	*A.G.*	*Bartlett*
Sawyer, Philip John	*For.*	*Concord*
Schwartz, Ivah-Lee	*A.G.*	*Lawrence, Mass.*
Scott, Walter Ellsworth, Jr.	*A.G.*	*Portsmouth*
Selzer, Milton	*A.G.*	*Portsmouth*
Senior, Walter Manning, Jr.	*For.*	*Melvin Village*
Sewall, Ann Jacqueline	*A.G.*	*York Village, Me.*
Shattuck, George William	*A.G.*	*Pepperell, Mass.*
Shea, Henry Richard, Jr.	*A.G.*	*Swampscott, Mass.*
Sheahan, Edmund Corbett	*C.E.*	*Somersworth*
Sherbo, Arthur	*A.G.*	*Haverhill, Mass.*
Sherburne, Ruth Evelyn	*A.G.*	*Pelham*
Sherry, Francis James	*Chem.*	*Somersworth*
Shmishkiss, Stanley	*A.G.*	*Lynn, Mass.*
Simpson, Carl Leroy	*Gen. Bus.*	*Lakeport*
Sims, Laura Jeanette	*A.G.*	*Concord*
Sives, Charlotte Lucille	*A.G.*	*Londonderry*
Slater, William Schoonmaker	*M.E.*	*New Haven, Conn.*
Small, Earl George	*Pre-Med.*	*Manchester*
Smith, Harold Bryant	*C.E.*	*Laconia*
Smith, Louise Charlotte	*Hort.*	*Gilford*
Smith, Phil Justin Paul	*E.E.*	*Tamworth*
Smith, Ruth Zaidee	*A.G.*	*Lincoln*
Snook, Helen May	*A.G.*	*Portsmouth*
Sopel, Kassie Mary	*A.G.*	*Newmarket*
Spearman, William Edward	*C.E.*	*Concord*
Spellman, Francis Augustine	*A.G.*	*Concord*
Spence, Robert Caldwell	*A.G.*	*Nashua*
Stafford, Edward Raymond	*M.E.*	*Berlin*

FRESHMEN

Name	Course	P. O. Address
Stanley, David Gilbert	*Chem.*	*Woodsville*
Stanley, Fred Donald	*M.E.*	*Conway*
Stanton, Faith Honoria	*Gen. Bus.*	*Durham*
Staples, Barbara	*Pre-Med.*	*Portsmouth*
Stimson, Ruth Geneve	*H.E.*	*Dover*
Stitt, Richard Thomas	*Chem.*	*North Wakefield*
Stone, Joseph Louis	*Chem.*	*Claremont*
Stone, Meda Elizabeth	*A.G.*	*Danvers, Mass.*
Stott, John Graeber	*Chem.*	*Sanford, Me.*
Swasey, John Fall, Jr.	*Gen. Bus.*	*Exeter*
Sweet, Dan Frederick	*Chem.*	*Westfield, N. J.*
Sweet, Harold Aumond, Jr.	*Chem.*	*Westfield, N. J.*
Sylvester, Russell Lester	*M.E.*	*Wolfeboro*
Szot, Walter	*A.G.*	*Manchester*
Tanner, Harry William	*A.G.*	*North Barnstead*
Tasker, Leslie Richard, Jr.	*Chem.*	*Epping*
Taylor, Rebecca Jane	*A.G.*	*Lakeport*
Taylor, Robert Ralph	*M.E.*	*Canaan*
Temple, Mary Elizabeth	*A.G.*	*Exeter*
Thayer, Mollie Forbes	*A.G.*	*LaGrange, Ill.*
Thayer, Stuart William	*M.E.*	*Melrose, Mass.*
Theros, Arthur George	*A.G.*	*Nashua*
Thompson, Herbert Edward	*M.E.*	*Center Ossipee*
Thompson, Wendell Snow	*M.E.*	*Center Ossipee*
Tobin, Helen Howes	*A.G.*	*Canaan*
Toussaint, Paul Arthur	*A.G.*	*Berlin*
Traver, Gordon Anderson	*Agr. Tr.*	*Raymond*
True, Harry Frank	*C.E.*	*Portsmouth*
Turcotte, Robert Edgar	*Chem.*	*Lowell, Mass.*
Tuttle, Dorothy Mae	*A.G.*	*Exeter*
Twombly, Robert Williams	*A.G.*	*Portsmouth*
Tyler, Howard Walter	*For.*	*Rochester*
Underwood, Theodore Arthur	*A.G.*	*Milford*
Upham, Madeline Elizabeth	*A.G.*	*Reed's Ferry*
Vasiliou, Helen Elaine	*A.G.*	*Manchester*
Volinn, Sidney	*A.G.*	*Dorchester, Mass.*
Walden, Eino	*C.E.*	*Franklin*

Name	Course	P. O. Address
Walker, Stewart James	*Chem.*	*Penacook*
Walton, Wilfred George	*For.*	*South Sutton*
Ward, Robert Royden	*Gen. Bus.*	*Kennebunk, Me.*
Warren, Frank Orville	*Pre-Med.*	*Manchester*
Waterhouse, Mary Elizabeth	*A.G.*	*Stoneham, Mass.*
Watson, Ellen Evelyn	*H.E.*	*Manchester*
Webb, Thomas Pemberton	*A.G.*	*Dover*
Weden, Norman Charles	*For.*	*Woodsville*
Wein, Eber Abraham	*Pre-Med.*	*Laconia*
Weinstat, Hertzel	*A.G.*	*Claremont*
Weinstat, Judith Esther	*A.G.*	*Claremont*
Weir, Margaret	*A.G.*	*Durham*
Wendell, Helen	*Gen. Bus.*	*Portsmouth*
Wentworth, Cecil Edmund	*M.E.*	*Sanbornville*
Wheeler, Edwin James	*D.H.*	*Milford*
Wheeler, Gladys Nellie	*A.G.*	*Dover*
Whitcher, Raymond Reed	*M.E.*	*Berlin*
White, Dorothy May	*H.E.*	*Concord*
Whittier, Royce Ernest	*Pre-Med.*	*Concord*
Wiggin, Charles Cartland	*For.*	*Newmarket*
Willette, Helen Barbara	*A.G.*	*Nashua*
Williams, Dwight Velmore	*Pre-Med.*	*Seabrook*
Williams, John Floyd	*A.G.*	*Nashua*
Wilson, Sumner Frederick	*A.G.*	*Boston, Mass.*
Winterbottom, Frederick Wm.	*A.G.*	*Bethlehem*
Wolf, Myer Richard	*Arch.*	*Haverhill, Mass.*
Wolfe, Winifred Nora	*H.E.*	*New York City*
Woodbury, Kenneth Donald	*A.G.*	*Suncook*
Woods, Walter Clarke	*D.H.*	*Bath*
Woodward, John Morrill	*Agr.*	*Southboro, Mass.*
Woodward, Karl Wilson, Jr.	*For.*	*Durham*
Woolner, Gordon Page	*For.*	*Manchester*
Worcester, Benj. Fassenden, 2nd	*M.E.*	*Manchester*
Worden, John Cattanach	*E.E.*	*Hinsdale*
Wright, Frank Vernon, Jr.	*C.E.*	*North Harpswell, Me.*
Wyman, Linwood Stanley	*M.E.*	*South Berwick, Me.*
Young, Robert Worthen	*M.E.*	*Portsmouth*
Zulauf, Gladys Isabel	*A.G.*	*Wolfeboro*

SPECIAL STUDENTS

(Men, 17; Women, 14; Total, 31)

Name	Course	P.O. Address
Baer, Arnold Maurice	*A.G.*	*Dover*
Belknap, James Lyman	*Agric.*	*Wolfeboro*
Dodge, Mary	*A.G.*	*Durham*
Brown, James Butler	*A.G.*	*Concord*
Christophil, Louis Basil	*A.G.*	*Manchester*
Columbia, Richard	*A.G.*	*Canaan*
Curtis, Ruth Sampsell	*A.G.*	*Durham*
Fuller, Barbara Dickerman	*A.G.*	*Atkinson*
Downey, Paul Milton	*A.G.*	*Nashua*
Drake, John	*A.G.*	*Dover*
Farrington, Samuel Carlton	*Tech.*	*West Claremont*
Gilman, Alice Maude	*A.G.*	*Raymond*
Grierson, Harry William	*A.G.*	*Rochester*
Haughton, Nancy Creux	*A.G.*	*Exeter*
Henderson, Helen	*A.G.*	*Durham*
Hennessy, John Joseph	*A.G.*	*Newton, Mass.*
Johnson, Philip Edgar	*Agric.*	*Durham*
Knight, Ethel Marion	*A.G.*	*West Ossipee*
Lapeza, Terry Frank	*A.G.*	*Nashua*
Prescott, Edith Hilliard	*A.G.*	*Kensington*
Ridgway, Phyllis Mae	*A.G.*	*Bethlehem*
Rollins, Elizabeth	*A.G.*	*Dover*
Roberts, Henry Edson	*Agric.*	*South Royalton, Vt.*
Ruch, Pauline Otis	*Agric.*	*York Village, Me.*
Sheppard, Hannah Wallen	*A.G.*	*Dover*
Shively, Audrey Peters	*A.G.*	*Andover*
True, Robert Baxter	*A.G.*	*Fremont*
Waananen, Arvi Olavi	*A.G.*	*Concord*
Webster, Frank George 2nd	*Agric.*	*Durham*
Webster, Helen T.	*Agric.*	*Durham*
Wiggin, Herbert Leslie	*Agric.*	*Newmarket*

FIRST YEAR

(Men, 23)

NAME	P.O. ADDRESS
Bean, Joseph Smith	*Orford*
Bishop, Harold Green	*Hillsboro*
Brackett, John Roland	*Greenland*
Brett, Kenneth Arthur	*Tamworth*
Davis, John Dudly	*Short Falls*
Duffill, Herbert Eaton	*Greenwood, Mass.*
Fournier, Albert Oscar	*Somersworth*
Keith, Edson Warren	*Norwich, Vt.*
Klinge, Albert John	*Gonic*
Laughton, Hartford Case	*Nottingham*
Leighton, Edgar Lawson, Jr.	*Temple*
Leslie, Edward Selwyn	*Manchester*
Littlefield, Robert Lowe	*Wells, Me.*
Moriarty, Joseph Bernard	*Durham*
Pierce, John Chandler	*Norwich, Vt.*
Rutherford, Richard Roy	*Plymouth*
Sawyer, Channing Pierce	*Wilmot*
Simpson, Leonard George	*Derry*
Steele, George Franklin, Jr.	*Milford*
Taylor, Donald Clifford	*Berlin*
Thompson, Virginia Elizabeth	*Wilmot*
Warren, Carl Albert	*Lyndeboro*
Willoughby, Kyle Edson	*Plymouth*

(SECOND YEAR)

(Men, 12)

NAME	P.O. ADDRESS
Bruce, Irvin Quimby	*Claremont*
Dagostino, Michael Jules	*Dover*
Ellison, Robert Lincoln	*Exeter*
Gammell, John Curtis	*Henniker*
Goodwin, Floyd Joseph	*Lebanon*
Hill, Daniel Cecil	*Winchester*

TWO-YEAR AGRICULTURAL STUDENTS

Name	P. O. Address
Kalil, George Michael	*Lowell, Mass.*
Keith, Thomas Currier	*Norwich, Vt.*
Laviolette, Edward Lawrence	*Stratham*
Perkins, John Cameron	*Exeter*
Woods, Harry Whitney	*Bath*
Zoerb, Conrad Franklin	*Derry*

ENROLLMENT—SUMMER SESSION—1936

(Men, 183; Women, 147; Total, 330)

Name	Coll. and Degree	Address
Adams, Grace V.	*Millersville St. Teachers' '31*	*Lancaster, Pa.*
Adams, Stanley S.	*Keene '34 B. Ed.*	*Portsmouth*
Aladovich, Edna H.	*Simmons '36 B.S.*	*Haverhill, Mass.*
Allen, William B.	*Bowdoin*	*Cranston, R. I.*
Andrews, E. Vincent	*N. H. '39*	*Dover*
Ayer, Theodore H.	*N. H. '29 B.S.*	*Milton Mills*
Bailey, Annie E.	*Wellesley '13 B.A.*	*Katonah, N. Y.*
Bailey, Lewis D.	*Keene '30*	*West Lebanon*
Banister, Rolfe G.	*N. H. '20 B.S.*	*Portsmouth*
Bartlett, Marion L.	*Vt. '37*	*Bradford, Mass.*
Bartlett, May M.	*Wheaton '16 A.B.*	*Sunapee*
Barton, Philip S.	*N. H. '28 B.S.*	*Weare*
Beaven, Theodore	*Toronto '17*	*Manchester*
Bennett, Clare H.	*Mich. '33 M.A.*	*Springport, Mich.*
Bennett, John P.	*N. H. '39*	*Portsmouth*
Bennett, Marian S.	*Albion '25*	*Spring Arbor, Mich.*
Bickford, Gladys C.	*N. H. '20 B.S.*	*Gonic*
Blackington, Frank H.	*Bates '21 A.B.*	*Keene*
Blanchard, Richard S.	*Yale '36 B.S.*	*Rochester*
Blagden, Phyllis	*Nasson and Simmons*	*Harpers Ferry*
Bloom, Abraham	*R. I. '34 B.S.*	*Providence, R. I.*
Blossom, Anna H.	*Brown '26 Ph.B.*	*Hanover*
Bond, Thelma K.	*Plymouth '32*	*Derry*
Bourn, Alger S.	*Yale '30 B.S., M.I.T., '31 M.S.*	*Exeter*
Bourn, Barbara		*Exeter*
Braconier, Harry E.	*N. H. '37*	*Brockton, Mass.*
Bray, Inez D.		*Portsmouth*
Brooks, Paul F.	*N. H. '36*	*Greenfield*
Brown, Eugenia H.		*Portsmouth*
Brown, James B.	*Dartmouth '32 A.B.*	*Concord*
Brown, Philip W.	*N. H. '37*	*Pittsfield*

Name	Coll. and Degree	Address
Bruce, Robert E.	*N. H. '29 B.S.*	*Ashland*
Burns, Frederic L.	*N. H. '39*	*Manchester*
Burrows, William M.		*Exeter*
Button, Clara D.		*Kittery, Me.*
Byther, Lynnic P.	*Nasson '34*	*Millinocket, Me.*
Cady, George L.	*N. H. '39*	*Manchester*
Caldwell, Winston F.	*N. H. '38*	*Dover*
Carroll, Mary J.		*E. Hartford, Conn.*
Casey, Louise M.	*N. H. '38*	*Concord*
Chace, Dorothy	*Brown '21 Ph.B.*	*Northwood Narrows*
Charrier, Frederic E.	*Bangor Theol. '31*	*Sanford, Me.*
Chase, John Philip	*N. H. '34 B.S.*	*Henniker*
Child, Doris B.	*Keene '29 B.Ed.*	*Lisbon*
Chodokoski, Edward	*N. H. '37*	*Berlin*
Clarke, William H.		*Sanford, Me.*
Codaire, Charlotte	*N. H.*	*Manchester*
Collins, Louise E.	*Plymouth '33 B.Ed.*	*Laconia*
Conway, Mary E.	*R. I. Coll. of Ed. '31 B.Ed.*	*Westerly, R. I.*
Corbett, Elizabeth	*N. H. '36*	*Concord*
Couser, William G.	*Wesleyan '27 B.A.*	*Dover*
Cummings, Clarence	*N. H. '23 B.S.*	*Colebrook*
Cummings, Leslie S.	*N. H. '26 B.S.*	*Hampton*
Currier, George W.	*Colby '22 A.B.*	*West Lebanon*
Dalzell, Charles D.	*R. I. '19 B.S.*	*Walpole*
Danforth, H. Raymond	*N. H. '28 A.B.*	*Acworth*
Davidson, Gaston H.	*N. H. '25 A.B.*	*Tamworth*
Davis, Della R.	*Bridgewater State Teachers'*	*Durham*
Davis, Leonard W.	*N. H. '39*	*Bow Lake*
Davis, Susan T.		*Summit, N. J.*
Dennett, Carleton	*Haverford '23 B.S.*	*Walpole*
DeSchuiteneer, H. E.	*N. H. '38*	*Manchester*
Diman, Mildred	*Brown '09 A.B.*	*Exeter*
Dissell, Dorothy G.	*Wellesley '35 B.A.*	*W. Hartford, Conn.*
Dissell, Edward E.	*Williams '37*	*W. Hartford, Conn.*
Dodge, Eliot P.	*Mass. State '26 B.S.*	

Name	Coll. and Degree	Address
	Harvard '32 LL.B.	*Simsbury, Conn.*
Dodge, Ruth	*N. H. '37*	*Durham*
Doe, Ruth Eleanor	*Ohio Wesleyan '28 B.A.*	*Stratford, Conn.*
Dolan, Loretto G.	*N. H.*	*Nashua*
Dorsey, Eleanor E.	*Vermont '37*	*Ludlow, Vt.*
Douglas, Howard W.	*N. H. '36 B.S.*	*New Milford, Conn.*
Doukas, John G.	*Dartmouth '37*	*Keene*
Dow, Marion	*Keene '23*	*Pittsfield*
DuBuron, Ethel B.	*Emerson '14*	*Boston, Mass.*
Ebner, Albert B.	*Brown '28 Ph.B.*	*Thomaston, Conn.*
Edmunds, Sr., Arthur	*U. of Pa.*	*Franklin*
Ekdahl, N. Marguerite	*N. H. '34 B.S.*	*Durham*
Ekstrom, Stanley E.	*N.H. '34*	*W. Concord*
Embody, Alberta L.	*State Teachers, E. Stroudsburg, Pa.*	*Summit Hill, Pa.*
Erickson, Edward I.	*Bates '28 B.S.*	*Milford*
Evans, Charlotte	*Colby '33 A.C.S.*	*Concord*
Evans, Grace	*Colby '33 A.C.S.*	*Waltham, Mass.*
Ewing, Donald F.	*Dartmouth '31 A.B.*	*Keene*
Ewing, Lyle	*N. H. '39*	*Claremont*
Fahey, William E.	*Catholic '36 B.S.*	*Lewiston, Me.*
Farr, John C.	*Bowdoin '31 A.B.*	*Kittery Point, Me.*
Farrell, Lloyd H.	*N. H. 39*	*Dover*
Ferris, Basil M.	*N. H. 39*	*Lebanon*
Flaherty, Edna Grace	*N.H. '28 B.A.*	*Manchester*
Flocken, Robert H.	*Wesleyan '12 A.B.*	*Katonah, N. Y.*
Follansbee, Gladys M.	*Keene '29*	*Manchester*
Foss, Helen E.	*Bates '27 A.B.*	*Rochester*
Fowler, Doris M.	*N. H. '36 A.B.*	*Dover*
Fraser, William	*Holy Cross '36 B.Ph.*	*Manchester*
Frederickson, Meta	*Rutgers '35 B.S.*	*Jersey City, N. J.*
Frizzell, Donald	*Keene '34*	*Keene*
Frye, John Harvey	*Keene '31 B.Ed.*	*Hollis*
Fussell, Clyde G.	*Middlebury '25 A.B.* *Middlebury '26 A.M.*	*Derry Village*
Fussell, Dorothy S.	*Plymouth*	*Derry Village*
Galleani, Mentana	*N. H. '39*	*Dover*

Name	Coll. and Degree	Address
Gardner, Alfred E.	*N. H. '38*	*Plymouth*
Garvin, Mary A.	*N. H. '36*	*Sanbornville*
Glynn, Robert	*N. H. '38*	*Belleville, N. J.*
Goddard, Willard B.	*Kent State '29 B.S.Ed.*	*Canton, O.*
Godfrey, Eloise R.	*Rutgers '34 B.S.*	*Portsmouth*
Goodwin, Doris R.	*N. H. '36 B.S.*	*Piermont*
Gordon, Irvin H.	*Gorham Normal '32*	*Gorham, Me.*
Gordon, Samuel L.	*N. H. '37*	*Goshen*
Graham, James Wm.	*N. H. '39*	*So. Orange, N. J.*
Grant, Robert H.	*Bowdoin '33 A.B.*	*Kittery, Me.*
Gray, C. Maurice	*Dartmouth '28 A.B.*	*Contoocook*
Grierson, Harry W.	*Gorham '29*	*Rochester*
Grow, Marguerite	*N. H. '35 B.A.*	*Bradford, Vt.*
Gunn, Raymond F.	*N. H. '24 A.B.*	*Ashland*
Guptill, Hazel L.	*Bates '31 A.B.*	*Berwick, Me.*
Hall, Herbert L.	*N. H. '30 B.S.*	*Plymouth*
Halladay, Dorothy E.	*N.H. '37*	*Claremont*
Ham, Frances M.	*N. H. '38*	*Durham*
Hanel, Florence G.	*Plymouth '30 B.Ed.*	*Manchester*
Handleman, Howard P.		*Worcester, Mass.*
Hanson, Russell S.	*N. H. '36 B.S.*	*Tilton*
Harding, Stanley L.	*N. H. '35 B.S.*	*Farmington*
Hartwell, Lillian E.	*Lesley*	*Nashua*
Hatch, Osman P.	*Plymouth '31 B.Ed.*	*Lebanon*
Hawkins, Frederick W.	*N. H. '35 B.S.*	*Troy*
Hayes, Frederick A.	*Gordon '15* *Bangor '29*	*Penacook*
Henault, Lillian J.	*Plymouth '34 B.E.*	*Newport*
Henry, Lee B.	*Amherst '35 B.A.* *N. H. '36 M.E.*	*Andover*
Heyworth, Margarete M.		*Manchester*
Hill, Elizabeth	*Lowell Teachers' '35 B.S.*	*Milford*
Hinds, Doris G.		*Attleboro, Mass.*
Hodgdon, John G.	*N. H. '35 B.S.*	*Berlin*
Holt, Alfred S.	*Keene '29 B.E.*	*So. Lyndeboro*
Hood, Janet		*Hartford, Conn.*
Howell, Cecil V.	*N.H. '29 B.S.*	*Dover*

Name	Coll. and Degree	Address
Hoyt, Margaret S.	*Plymouth '06 and Vt.*	*Rutland, Vt.*
Hoyt, Raymond A.	*N. H. '28 B.A.*	*Woodsville*
Ives, Delavan W.	*N. H. '39*	*Wallingford, Conn.*
Jamback, Arvo J.	*N. H. '39*	*Lebanon*
Johnson, Eva E.	*N. H.*	*Whitehall, N. Y.*
Johnson, Mabel T.	*N. H. '33 B.S.*	*Northwood Narrows*
Jones, Elsie L.		*Portsmouth*
Jordan, Barbara C.	*N. H. '37*	*Windsor, Vt.*
Joy, Clarence L.	*Dartmouth '99 A.B.*	*Rochester*
Katz, Rose M.	*Hunter '38*	*New York*
Kay, William J.	*N. H. '38*	*Claremont*
Keach, Elliott Wm.	*Springfield '35 B.S.*	*Milford*
Kelleher, Marguerite M.	*R. I. '36 B.Ed.*	*Providence, R. I.*
Kelley, Edith G.	*Plymouth '29*	*Dover*
Keniston, Euna W.		*Newmarket*
Kenyon, Barbara	*R. I. Col. of Educ. '31 B.Ed.*	*Ashaway, R.I.*
Klein, Rose H.		*Hartford, Conn.*
Korab, John J.	*N. H. '39*	*Middletown, Conn.*
LaBorta, Pearl E.	*Keene '26*	*East Weare*
LaChance, Loretta M.		*Concord*
Ladd, Harold	*N. H. '20 B.S.*	*Bristol*
Ladieu, William H.	*Keene '31 B.E.*	*Newport*
LaFlamme, Charles R.	*Dartmouth '38*	*Manchester*
Larkin, Harriett	*N. H. '38*	*Winthrop, Mass.*
Larrabee, Carlton H.	*Clark '27 B.A.*	*Glenbrook, Conn.*
Larson, Roger C.	*Norwich '36 C.E.*	*Swampscott, Mass.*
Lawrence, Charles P.	*N.H. '37*	*Manchester*
Lessard, Madeleine C.	*St. Anselm's '32 A.B.*	*Manchester*
Lester, Bernice H.	*N. H. '31 B.A.*	*Pelham*
Levine, Noah	*N. H. '37*	*Boston, Mass.*
Liberty, James S.	*N. H. '39*	*Farmington*
Littlefield, Albion K.	*Colby '29 B.S.*	*North Berwick, Me.*
Lord, Charles Ed.	*N.H. '23 B.S.*	*Gilford*
Lorentz, John J.	*Catholic '38*	*Maspeth, L. I., N. Y.*

Name	Coll. and Degree	Address
Lynn, James A.	*Wentworth Inst. '22*	*Nashua*
McCaig, Ruth M.		*Concord*
McCormack, Stewart	*N. H. '37*	*Milford*
McGirr, Genevieve C.	*Keene '33 B.E.*	*Concord*
McGrail, Marie J.	*N. H. '30 A.B.*	*Dover*
MacIvor, Anna	*Dalhousie*	*Campton*
McKeigue, John E.	*N. H. '38*	*Bradford, Mass.*
McKenna, Gertrude V.	*Vermont*	*Fairhaven, Vt.*
McKenney, Harry C.	*Bates*	*Derry*
MacLeod, Helen P.	*Saskatchewan '28 B.S. in Pharm.*	*Durham*
McMahon, James D.	*N. H. '38*	*Providence, R. I.*
Mahar, Kathryn E.		*Worcester, Mass.*
Maitland, Alexander	*Bowdoin '38*	*Thompson, Conn.*
Martin, Richard A.	*N. H. '43 B.S.*	*Keene*
Martineau, Ramon F.	*Keene '33*	*Farmington*
Mason, Howard F.	*Dartmouth '31 A.B.*	*Amherst*
Matison, Matthew I.	*N. H. '37*	*Dover*
Maxam, Eugene C.	*N. H. '26 B.S.*	*Rochester*
Maynard, Wm.	*N. H. '39*	*Plymouth*
Meader, Elwyn M.	*N. H. '37*	*Rochester*
Merrill, Douglas	*N. H. '37*	*Concord*
Merriman, Lockwood	*Harvard '35 A.B.*	*Meriden*
Metcalf, Daniel M.	*N. H. '25 B.S.*	*Alstead*
Miles, Morey C.	*N.H. '34 B.S.*	*Claremont*
Miller, Verna E.		*Kittery, Me.*
Mills, Muriel	*Colorado '31 B.S.*	*Denver, Colorado*
Mitchell, Dorna	*Keene*	*Newmarket*
Morrill, Harold E.	*Keene '31 B.Ed.*	*Charlestown*
Morris, Frank A.	*N. H. '37*	*Concord*
Morris, Robert H.	*Brown '30 A.B.*	*Monson, Mass.*
Morrison, Dorothy E.	*Plymouth '28 B.Ed.*	*Groveton*
Morrissey, Margaret		*Manchester*
Morrow, Muriel		*Kittery, Me.*
Morse, Clara E.	*N. H. '38*	*Gorham*
Munroe, Ruth K.		*Dover*
Murphy, William J.		*Bristol, Conn.*

Name	Coll. and Degree	Address
Muzzy, Carolyn	*Wellesley '38*	*Wellesley, Mass.*
Naughton, Helen	*St. Teachers' '34 B.S.E.*	*North Adams, Mass.*
Neal, Robert	*Williams '37*	*Rochester*
Neligh, Florence M.	*Heidelberg '23 A.B.*	*Tiffin, Ohio*
Newton, John R.	*Yale '32 A.B.*	*Farmington*
Ninde, David C.	*Harvard '35 M.A.*	*Durham*
Norton, Jane	*Wellesley*	*Mt. Clemens, Mich.*
Norton, William	*N. H. '37*	*Hopkinton*
Nye, Gertrude E.	*N. H. '29 B.A.*	*Westville*
O'Brien, Paul J.	*N. H. '38*	*Nashua*
O'Leary, Maurice J.	*N. H. '28 B.A.*	*Rochester*
Osborne, Robert V.	*N. H. '39*	*Newton Junction*
Paine, Katherine G.		*New Hartford, Conn.*
Park, Virginia A.	*Keene '32 B.Ed.*	*Pittsfield*
Pelletier, Lawrence L.	*Bowdoin '36 A.B.*	*Springvale, Me.*
Peltonen, T. Ernest	*Keene '34 B.E.*	*Newport*
Perkins, Ernest M.	*N. H. '30 B.A.*	*Newport*
Pellerin, Jesse L.	*N. H. '27 B.S.*	*Farmington*
Perkins, John H.	*N. H. '36*	*Pittsfield*
Pettengill, James B.	*N. H. '12 B.A.*	*Manchester*
Pierce, Frances E.	*Keene '31 B.A.*	*Tamworth*
Pierce, Mildred E.	*Gorham '18*	*Kittery, Me.*
Piper, Bertha S.	*N. H.*	*Amherst*
Poirier, Wilfred	*Keene*	*Lincoln*
Potvin, Claire	*Trinity '34 B.S.*	*Claremont*
Powers, Charlotte	*Plymouth '32*	*Manchester*
Pratt, Helen M.	*Keene '36 B.Ed.*	*Keene*
Quinn, George E.	*N. H. '38*	*Concord*
Rand, Olan A.	*Washington and Lee '26 B.A.*	*Derry*
Rangazas, Eva	*N. H. '38*	*Nashua*
Rassias, Christine	*N. H. '38*	*Manchester*
Rennie, Jack W.	*Williams '37*	*St. Petersburg, Fla.*
Rexford, Dean R.	*Norwich*	*Johnson, Vt.*
Richardson, Charles E.	*N. H. '38*	*Lynn, Mass.*
Richardson, Roxanna E.	*Bates '12 B.A.*	*Northwood Center*
Rizzi, Paul	*Keene '32*	*Milford*

Name	Coll. and Degree	Address
Robbins, Ruth H.	*Gorham '32*	*Kittery, Me.*
Robinson, Bernard B.	*Catholic*	*Laconia*
Roe, Henrietta	*N. H. '33 M.Ed.*	*Portsmouth*
Rogers, George H.	*Rollins '35 B.S.*	*Dover*
Rogers, Muriel C.		*Gloucester, Mass.*
Rourke, Eugene E.	*N. H. '29 A.B.*	*Exeter*
Russell, Cora J.	*Wellesley '98 A.B.*	*Manchester*
Rutkauskas, John	*N. H. '39*	*Haverhill, Mass.*
Sanders, Mina M.		*Dover*
Saunders, Elizabeth G.		*Newmarket*
Sawyer, Russell D.	*Northeastern*	*Concord*
Saylor, Grace A.	*Millersville St. Teachers'*	*Lancaster, Pa.*
Scarbrough, Marvin	*Duke Univ.*	*New Haven, Conn.*
Schilling, Falko	*N. H. '39*	*Manchester*
Shaw, Inez	*Wheaton '34 A.B.*	*Jackson Heights, N. Y.*
Shea, Harold F.		*Lynn, Mass.*
Sheehan, Wilfred J.	*Trinity '31 B.S.*	*New Britain, Conn.*
Shields, Dorothy	*Bates '36 A.B.*	*Rochester*
Shuttleworth, Ira V.	*Y.M.C.A. Col. Springfield B.P.E.*	*Pearl River, N. Y.*
Slayton, Foster H.	*N. H. '28 B.S.*	*Portsmouth*
Smith, Charles W.	*N. H. '23 B.S.*	*Portsmouth*
Smith, Clyde R.	*N. H. '37*	*Newmarket*
Smith, Eugene	*N. H. '32 B.S.*	*New Hampton*
Smith, F. Blanche	*Goucher '32 B.A.* *Columbia '34 M.A.*	*Passaic, N. J.*
Smith, John Clark	*N. H*	*Lynn, Mass.*
Smith, Laurence J.	*Emerson '17 B.L.I.*	*Franklin, Pa.*
Smith, Richard	*N. H. '38*	*Barnstead*
Smith, Willard H.	*Dartmouth '27 A.B.* *N.H. '35 M.A.*	*Exeter*
Solomon, Philip	*N. H. '38*	*Franklin*
Spinney, Fannie M.	*N. H. '22 A.B.*	*Dover*
Staples, Barbara	*N. H. '40*	*Portsmouth*
Starrett, Howard M.	*Gordon '30 Th.B.*	*Sanford, Me.*
Stevenson, Gratton A.	*N. H. '39*	*Queens Village, N. Y.*
Stewart, Donald W.	*N. H. '37*	*E. Orange, N. J.*

Name	Coll. and Degree	Address
Stickle, Gertrude W.	*N. H. '36*	*E. Cleveland, Ohio*
Stiles, William H.	*Lafayette '36*	*Westfield, N. J.*
Street, James C.	*Princeton '36 A.B.*	*St. Louis, Mo.*
Styring, Wm.	*Trinity '37*	*Southington, Conn.*
Sullivan, Catherine F.		*Manchester*
Summerville, George H.	*N. H. '26 B.S.*	*Manchester*
Sykes, Paul Wm.	*Trinity '31 B.S.*	*Northwood*
Sylvestre, Naomi R.	*N. H. '35 B.S.*	*Littleton*
Tebbetts, Florence M.	*N. H. '36 B.S.*	*Nashua*
Teed, Alice	*Emerson '28 B.L.I.*	*Medford, Mass.*
Terrill, Roy L.	*N. H. '33 B.S.*	*Keene*
Thayer, Olive J.	*N. H. '34 B.S.*	*Epping*
Thayer, Patricia A.	*N. H. '32 A.B.*	*Epping*
Thomas, Elizabeth	*Emerson '21 B.L.I.*	*Aurora, Ill.*
Thompson, Malcolm H.	*Plymouth '37*	*Plymouth*
Thompson, Stewart D.	*Keene '32*	*Hillsboro*
Tirrell, Alice D.	*N. H. '25 B.A.*	*Manchester*
Toll, Arthur	*N. H. '35*	*Manchester*
Tolles, Marion E.	*Middlebury '31 A.B.*	*Terryville, Conn.*
Toolin, Brendan E.	*N. H. '36*	*Leominster, Mass.*
Torrey, William G.	*Hamilton '38*	*Syracuse, N. Y.*
Towle, Harriet N.	*Wellesley '36 B.A.*	*Exeter*
Trabucco, Alfred	*N. H. '38*	*New Hampton*
Trubenbach, Alfred	*N. H. '37*	*New York*
Turner, Ralph W.	*Harvard '28 S.B.*	*Framingham, Mass.*
Vail, Doris E.	*Miss Wheelock's*	*Manchester*
Varney, Bertha R.	*Plymouth '27*	*Bartlett*
Villanova, Elizabeth	*N. H. '36*	*Rochester*
Voigt, Amelia H.	*Salem St. Teachers' College '27 B.S.Ed.*	*Easthampton, Mass.*
Waegeneece, Marguerite	*Plymouth '32 B.Ed.*	*Manchester*
Wagner, Richard D.	*Norwich '34 B.S.*	*Berlin*
Walker, Emily L.	*Wheaton '38*	*Concord*
Walker, Fred C.	*N. H. '35 B.S.*	*Dover*
Walker, Genevieve	*N. H. '37*	*Tilton*
Walsh, Thomas J.	*N. H. N. Y. U*	*Edwardsville, Pa.*
Wardrop, Irene E.	*Michigan State '31*	*Amesbury, Mass.*

Name	Coll. and Degree	Address
Washburn, Alice	*Hartford Sem. Found.*	*W. Lebanon, Me.*
Washburn, Howard	*Trinity '25 A.B.*	*W. Lebanon, Me.*
Watson, Murray H .	*Bates*	*Lisbon*
Weare, Louise D.	*Gorham*	*Kittery Point, Me.*
White, Dorothy E.	*Plymouth '33*	*Newport*
Whitney, Dorothy L.	*Keene '31 B.E.*	*Lakeport*
Whitney, Richard M.	*N. H. '33 B.S.*	*Dover*
Whittemore, John K.	*N. H. '30 B.S.*	*Walpole*
Wieners, August	*Hamilton '37*	*Englewood, N. J.*
Williams, Dorothy	*N. H. '33 B.A.*	*Dover*
Williams, James A.	*Conn. '31 B.S.*	
Wilson, Ruth E.	*Bates '31 A.B.*	*Maynard, Mass.*
Winslow, Howard L.	*Wesleyan*	*Somersworth*
Wiseman, Israel	*N. H. '36*	*Dover*
Woodbury, Jane W.	*N. H. '37*	*Salem Center*
Wootton, Margaret B.	*N. H. '37*	*Wolfeboro*
Worster, Juliette	*Gorham '23*	*Eliot, Me.*
Wright, Philip L.	*N. H. '35 B.S.*	*Nashua*
Young, Olive L.	*N. H.*	*Manchester*
Theriault, J.		*Haverhill, Mass.*

COMPARATIVE REGISTRATION

	Regular Curricula	Summer School and Short Curricula*	Men (Less duplicates)	Women (Less duplicates)	Total (Less duplicates)
1893–94	64	...	54	10	64
1894–95	93	15	78	30	108
1895–96	83	29	80	32	112
1896–97	88	17	79	26	105
1897–98	82	50	90	42	132
1898–99	82	10	79	13	92
1899–1900	86	33	103	16	119
1900–01	93	32	115	10	125
1901–02	102	29	125	6	131
1902–03	103	18	117	4	121
1903–04	110	24	126	8	134
1904–05	123	36	151	8	159
1905–06	154	41	183	12	195
1906–07	172	38	196	14	210
1907–08	183	20	188	15	203
1908–09	198	33	218	13	231
1909–10	193	55	312	16	328
1910–11	207	73	249	17	280
1911–12	231	84	285	22	315
1912–13	259	95	306	30	354
1913–14	300	103	322	63	403
1914–15	387	131	405	87	518
1915–16	461	192	505	113	653
1916–17	574	92	514	152	666
1917–18	530	32	399	163	562
1918–19†	593	14	439	168	607
1919–20	774	44	631	187	818
1920–21	845	46	682	209	891
1921–22	907	66	759	214	973
1922–23	1,036	161	922	275	1,197
1923–24	1,154	175	993	336	1,329
1924–25	1,202	229	1,029	402	1,431
1925–26	1,348	267	1,143	471	1,614
1926–27	1,491	317	1,217	567	1,784
1927–28	1,658	306	1,277	626	1,903
1928–29	1,553	365	1,294	624	1,918
1929–30	1,586	367	1,285	668	1,953
1930–31	1,646	382	1,297	664	1,961
1931–32	1,712	437	1,354	669	2,023
1932–33	1,673	463	1,429	610	2,039
1933–34	1,616	341	1,295	586	1,881
1934–35	1,520	360	1,212	574	1,786
1935–36	1,626	369	1,316	624	1,940

* Includes Summer School, Two-Year Agriculture, Poultry Extension and Dairy Short Curricula.

† During 1918–19 there were 1,467 additional men registered for special military work under the S.A.T.C. organization.

SUMMARY OF REGISTRATION, 1935-36

College	Agriculture											Liberal Arts									Technology							Graduate			Grand Total		
Regular Curricula	General	Teacher Training	Poultry Husbandry	Animal Husbandry	Dairy Husbandry	Forestry	Horticulture	Agricultural Chemistry	Botany	Entomology	Total	General	General Business	Pre-Law	Pre-Medical	Physical Education	Education	Home Economics	Social Service	Public Health	Total	Architecture	Chemical Engineering	Civil Engineering	Electrical Engineering	Mechanical Eng'g.	General	Total	Men	Women	Total	Men	Women	Total
Senior—Men	7	2	5	1	3	11	4	..	..	..	33	88	26	2	16	..	28	.	..	..	160	8	22	16	9	18	..	73	...	...	...	266	...	266
Women	..	..	..	..	..	..	..	..	..	..	...	48	...	..	2	6	7	18	1	..	82	...	...	...	...	...	..	..	...	...	...	....	82	82
Total	7	2	5	1	3	11	4	..	..	..	33	136	26	2	18	6	35	18	1	..	242	8	22	16	9	18	..	73	...	...	...	266	82	348
Junior—Men	3	3	1	2	3	21	4	1	..	..	38	59	27	3	13	..	17	..	.	..	119	5	12	16	10	13	..	56	...	...	...	213	...	213
Women	..	..	..	..	..	..	..	..	..	..	...	64	1	..	2	3	2	30	1	..	103	...	...	...	...	...	..	..	...	...	...	....	103	103
Total	3	3	1	2	3	21	4	1	..	..	38	123	28	3	15	3	19	30	1	..	222	5	12	16	10	13	..	56	...	...	...	213	103	316
Sophomore—Men	5	5	2	1	5	11	2	1	..	..	32	63	28	1	31	..	8	.	.	.	131	4	26	23	16	21	..	90	...	...	...	253	...	253
Women	..	..	..	..	..	..	..	..	..	..	...	68	3	..	...	3	3	20	6	1	104	...	...	...	...	...	..	..	...	...	...	....	104	104
Total	5	5	2	1	5	11	2	1	..	..	32	131	31	1	31	3	11	20	6	1	235	4	26	23	16	21	..	90	...	...	...	253	104	357
Freshman—Men	14	4	2	1	2	26	1	1	..	2	53	105	36	12	44	..	...	..	.	..	197	6	21	17	16	21	26	107	...	...	...	357	...	357
Women	..	..	..	..	..	..	..	..	..	..	...	109	2	5	2	3	...	24	7	..	152	2	...	...	...	...	..	2	...	...	...	....	154	154
Total	14	4	2	1	2	26	1	1	..	2	53	214	38	17	46	3	...	24	7	..	349	8	21	17	16	21	26	109	...	...	...	357	154	511
Special—Men	3	..	..	..	..	..	..	..	..	..	3	21	...	..	...	..	...	..	..	..	21	...	...	...	...	...	6	6	...	...	...	30	..	30
Women	..	..	..	..	..	..	..	..	..	..	...	12	...	..	...	..	...	..	..	..	12	...	...	...	...	...	..	..	...	...	...	....	12	12
Total	3	..	..	..	..	..	..	..	..	..	3	33	...	..	...	..	...	..	..	..	33	...	...	...	...	...	6	6	...	...	...	30	12	42

Graduate—Men																														37		37	37		37
Women																															15	15		15	15
Total																														37	15	52	37	15	52
Total—Regular Curricula	32	14	10	5	13	69	11	3		2	159	637	123	23	110	15	65	92	15	1	1081	25	81	72	51	73	32	334	37	15	52	1156	470	1626
SHORT CURRICULA																																					
Two-Year Agr.—2d yr.	11										11																						11		11
1st yr.	16										16																						16		16
Total	27										27																						27		27
Summer School—Men																																	174		174
1936 Women																																		168	168
Total																																	174	168	342
Total—Short Curricula	27										27																						201	168	369
Grand Total	59	14	10	5	13	69	11	3		2	186	637	123	23	110	15	65	92	15	1	1081	25	81	72	51	73	32	334	37	15	52	1357	638	1995
Less Duplicates	1										1	38									38						6	6	10		10	41	14	55
Net Gross Total	58	14	10	5	13	69	11	3		2	185	599	123	23	110	15	65	92	15	1	1043	25	81	72	51	73	26	328	27	15	42	1316	624	1940
Totals 1934–35	60	7	10	7	10	42	17	3	1	4	161	510	128	24	113	13	98	85	9		980	25	86	69	69	82		331	23	9	32	1212	574	1786

UNIVERSITY OF NEW HAMPSHIRE ALUMNI ASSOCIATION

The Alumni Association welcomes to its active membership all two-year and four-year graduates, and all former students are invited to become associate members. An Alumni Office is maintained to serve the alumni, and an Alumni Fund permits alumni voluntarily to contribute to some specific University project.

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1st Vice-President	Frank W. Randall, '07, 46 Congress St., Portsmouth, N. H.
2nd Vice-President	Mrs. Edna Henderson Hersey, '26, 48 Grove St., Somersworth, N. H.
Alumni Secretary	Eugene K. Auerbach, '28, Durham, N. H.

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Frederick L. Robinson, '27, 33 Newton Place, Framingham, Mass.

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Secretary	Edward J. Hanna, Jr., '33, Main St., West Swanzey, N. H.
Treasurer	Eleanor W. Harris, '29, 61 Park Ave., Keene, N. H.

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Sec.-Treas.	Heman C. Fogg, '18, Bagdad Road, Durham, N. H.

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Vice-Pres.	Vasilios A. Vasiliou, '31, 416 Cedar St., Manchester, N. H.
Sec.-Treas.	Mrs. May Eckford Geremonty, '28, 448 Ray St., Manchester, N. H.

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Vice-Pres.	Marion A. Hough, '33, 47 Peck Ave., Riverside, R. I.
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